

IMPORTANT SERVICE SAFETY PRECAUTION

- Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.
3. Semiconductor heat sinks are potential shock hazards when the chassis is operating.
4. The chassis in this receiver has two ground systems which are separated by insulating material. The non-isolated (hot) ground system is for the B+ voltage regulator circuit and the horizontal output circuit. The isolated ground system is for the low B+ DC voltages and the secondary circuit of the high voltage transformer.
To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.



SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

X-RADIATION AND HIGH VOLTAGE LIMITS

1. Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation, if the high voltage is as specified in the "High Voltage Check" instructions.
It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in the glass material. The important precaution is to keep the high voltage below the maximum level specified.
2. It is essential that servicemen have available at all times an accurate high voltage meter. The calibration of this meter should be checked periodically.
3. High voltage should always be kept at the rated value –no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and;also, under certain conditions, may produce radiation in exceeding of desirable levels.
4. When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
6. When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver.
Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

IMPORTANT SERVICE SAFETY PRECAUTION

(Continued)

BEFORE RETURNING THE RECEIVER

(Fire & Shock Hazard)

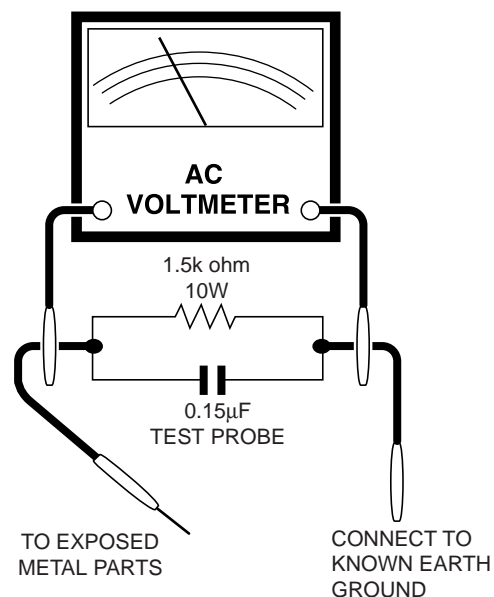
Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators and etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
 - Plug the AC cord directly into a 120 volt AC outlet, (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
 - Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.

- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon and etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC ine cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.)

Any current measured must not exceed 0.5 milliamp. Any measurements not within the limits outlined above indicate of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



SAFETY NOTICE

Many electrical and mechanical parts in television receivers have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by " \triangle " and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

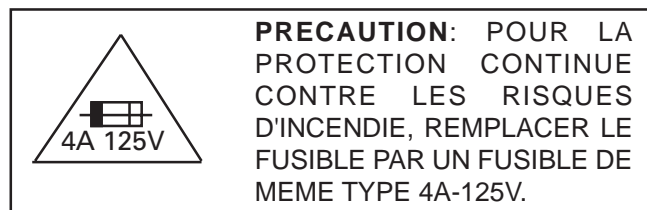
For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

PRECAUTIONS A PRENDRE LORS DE LA REPARATION

■ **Ne peut effectuer la réparation qu' un technicien spécialisé qui s'est parfaitement accoutumé à toute vérification de sécurité et aux conseils suivants.**

AVERTISSEMENT

1. N'entreprendre aucune modification de tout circuit. C'est dangereux.
2. Débrancher le récepteur avant toute réparation.
3. Les déversoirs thermiques à semi-conducteurs peuvent présenter un danger de choc électrique lorsque le récepteur est en marche.
4. Le châssis de ce récepteur possède deux systèmes de masse qui sont séparées par du matériel d'isolation. Le système de masse non-isolée (sous tension) est pour le circuit du régulateur de tension B+ et le circuit de sortie horizontale. Le système de masse isolée est pour les tensions DC B+ basses et le circuit secondaire du transformateur haute tension. Pour éviter tout risque d'électrocution lors de l'entretien de ce châssis, utiliser un transformateur d'isolation entre le cordon de ligne et la prise de courant.



REPARATION DU SYSTEME A HAUTE TENSION ET DU TUBE-IMAGE

Lors de la réparation de ce système, supprimer la charge statique en branchant une résistance de 10 k Ω en série avec un fil isolé (comme une sonde d'essai) entre la mise à la terre du tube-image et le fil d'anode. (Le cordon d'alimentation doit être retiré de la prise murale.)

1. Le tube image dans ce récepteur emploie une protection intégrée contre l'implosion.
2. Par mesure de sécurité, changer le tube-image pour un tube du même numéro de type.
3. Ne pas lever le tube-image par son col.
4. Ne manipuler le tube-image qu'en portant des lunettes incassables et qu'après avoir déchargé totalement la haute tension.

LIMITES DES RADIATIONS X ET DE LA HAUTE TENSION

1. Tout le personnel réparateur doit être instruit des instructions et procédés relatifs aux radiations X. Le tube-image, seule source de rayons X dans les téléviseurs transistorisés, n'émet pourtant pas de rayons mesurables si la haute tension est maintenue à un niveau préconisé dans la section "Vérification de la haute tension". C'est seulement quand la haute tension est excessive que les rayons X peuvent entrer dans l'enveloppe du tube-image y compris le conducteur de verre. Il est important de maintenir la haute tension en-dessous du niveau spécifié.
2. Il est essentiel que le réparateur ait sous la main un voltmètre à haute tension qui doit être périodiquement étalonné.
3. La haute tension doit toujours être maintenue à la valeur de régime -et pas plus haute. L'opération à des tensions plus élevées peut entraîner une panne du tube-image ou du circuit à haute tension et, dans certaines conditions, peut entraîner une radiation dépassant les niveaux prescrits.
4. Quand le régulateur à haute tension fonctionne correctement, il n'y a aucun problème de radiation X. Chaque fois qu'un châssis couleurs est réparé, la luminosité doit être examinée tout en contrôlant la haute tension à l'aide d'un voltmètre pour s'assurer que la haute tension ne dépasse pas la valeur spécifiée et qu'elle soit correctement réglée.
5. Ne pas utiliser un tube-image autre que celui spécifié et ne pas effectuer de modifications déconseillées du circuit à haute tension.
6. Lors de la recherche des pannes et des mesures d'essai sur un récepteur qui présente une haute tension excessive, éviter de s'approcher inutilement du récepteur.
Ne pas faire fonctionner le récepteur plus longtemps que nécessaire pour localiser la cause de la tension excessive.

PRECAUTIONS A PRENDRE LORS DE LA REPARATION

(Suite)

VERIFICATIONS CONTRE L'INCEN-DIE ET LE CHOC ELECTRIQUE

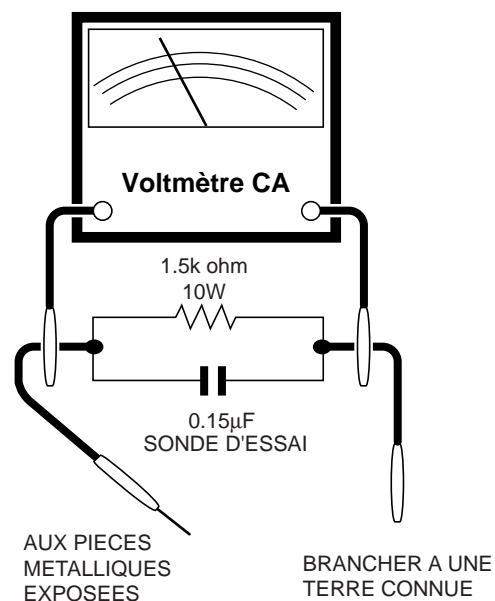
Avant de rendre le récepteur à l'utilisateur, effectuer les vérifications suivantes.

1. Inspecter tous les faisceaux de câbles pour s'assurer que les fils ne soient pas pincés ou qu'un outil ne soit pas placé entre le châssis et les autres pièces métalliques du récepteur.
2. Inspecter tous les dispositifs de protection comme les boutons de commande non-métalliques, les isolants, le dos du coffret, les couvercles ou blindages de réglage et de compartiment, les réseaux de résistance-capacité, les isolateurs mécaniques, etc.
3. S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la façon suivante:
 - Brancher le cordon d'alimentation directement à une prise de courant de 120V. (Ne pas utiliser de transformateur d'isolation pour cet essai).
 - A l'aide de deux fils à pinces, brancher une résistance de 1,5 k Ω 10 watts en parallèle avec un condensateur de 0,15 μ F en série avec toutes les pièces métalliques exposées du coffret et une terre connue comme une conduite électrique ou une prise de terre branchée à la terre.
 - Utiliser un voltmètre CA d'une sensibilité d'au moins 5000 Ω /V pour mesurer la chute de tension en travers de la résistance.

- Toucher avec la sonde d'essai les pièces métalliques exposées qui présentent une voie de retour au châssis (antenne, coffret métallique, tête des vis, arbres de commande et des boutons, écusson, etc.) et mesurer la chute de tension CA en-travers de la résistance. Toutes les vérifications doivent être refaites après avoir inversé la fiche du cordon d'alimentation. (Si nécessaire, une prise d'adpatation non polarisée peut être utilisée dans le but de terminer ces vérifications.)

Tous les courants mesurés ne doivent pas dépasser 0,5 mA.

Dans le cas contraire, il y a une possibilité de choc électrique qui doit être supprimée avant de rendre le récepteur au client.



AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les téléviseurs présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue. Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.

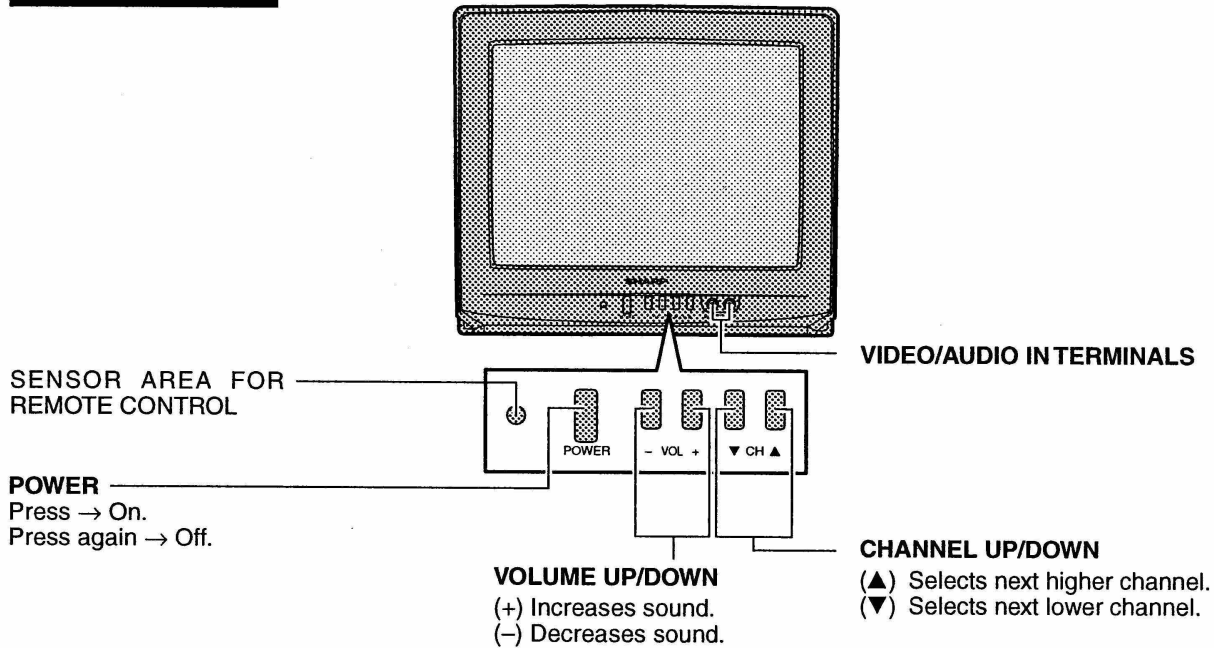
Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont

identifiées par la marque " \triangle " et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques.

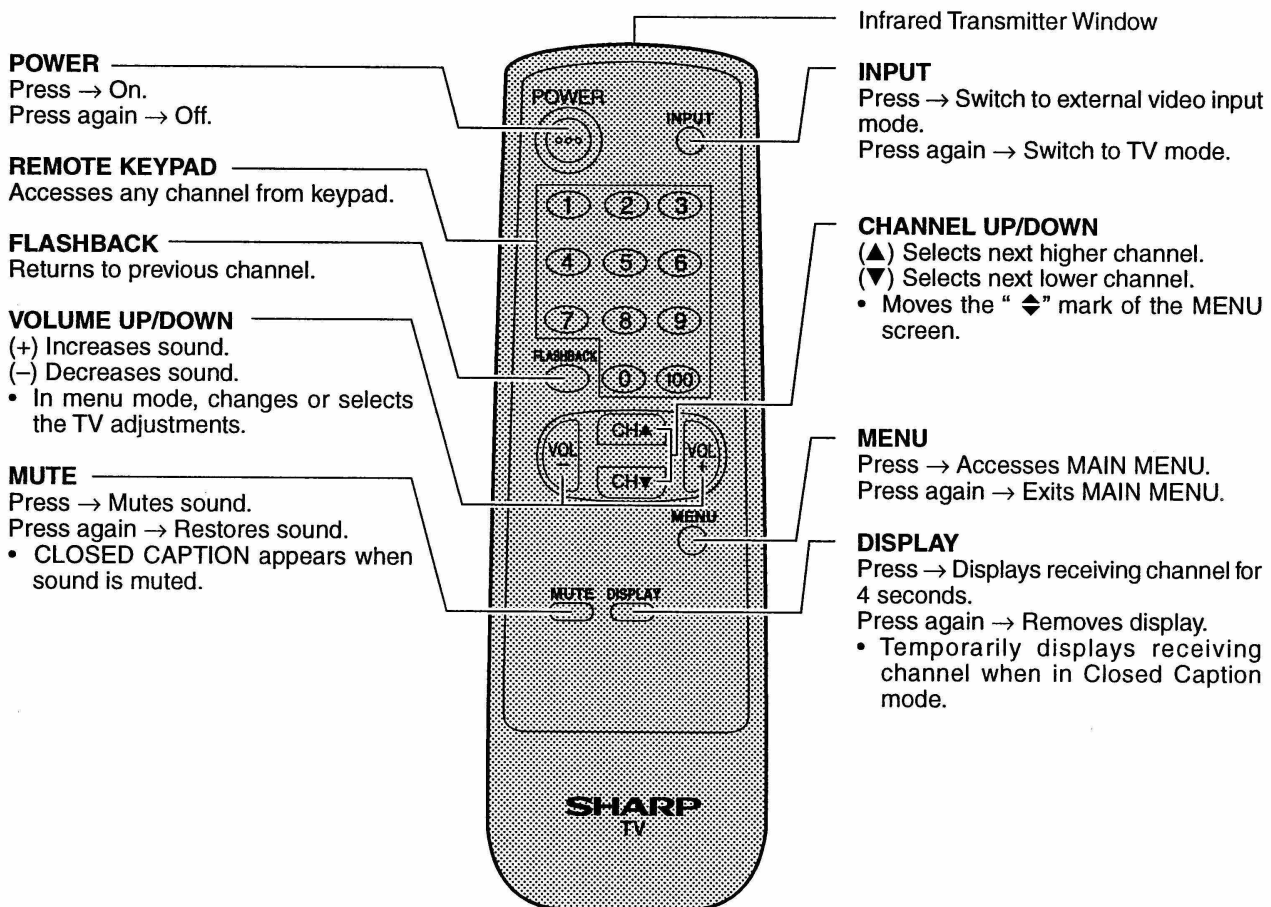
Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies, radiations X ou autres accidents.

LOCATION OF USER'S CONTROL

Front Panel



Basic Remote Control Functions



INSTALLATION AND SERVICE INSTRUCTIONS

- Note:** (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdrivers or TV alignment tools.
(2) Before performing adjustments, the TV set must be on at least 15 minutes.

CIRCUIT PROTECTION

The receiver is protected by a 4.0A fuse (F701), mounted on PWB-A, wired into one side of the AC line input.

X-RADIATION PROTECTOR CIRCUIT TEST

After service has been performed on the horizontal deflection system, high voltage system, B+ system, test the X-Radiation protection circuit to ascertain proper operation as follows:

1. Apply 120V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Receive a good local channel.
4. Connect a digital voltmeter to TP653 and make sure that the voltmeter reads $21.3 \pm 1.5V$.
5. Apply external 28.9V DC at TP653 by using an external DC supply, TV must be shut off.
6. To reset the protector, unplug the AC cord and make a short circuit between TP651 and TP652. Now make sure that normal picture appears on the screen.
7. If the operation of the horizontal oscillator does not stop in step 5, the circuit must be repaired before the set is returned to the customer.

HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified checks should be as follows:

1. Connect an accurate high voltage meter between ground and anode of picture tube.
2. Operate receiver for at least 15 minutes at 120V AC line voltage, with a strong air signal or a properly tuned in test signal.
3. Enter the service mode and select the service adjustment "S19" and Bus data "01" (Y-mute on).
4. The voltage should be approximately, 24.0kV (at zero beam).

If a correct reading cannot be obtained, check circuitry for malfunctioning components. After the voltage test, make Y-mute off to the normal mode.

For adjustments of this model, the bus data is converted to various analog signals by the D/A converter circuit.

Note: There are still a few analog adjustments in this series such as focus and master screen voltage. Follow the steps below whenever the service adjustment is required. See "Table-B" to determine, if service adjustments are required.

1. Service mode

Before putting unit into the service mode, check that customer adjustments are in the normal mode. Use the reset function in the video adjustment menu to ensure customer controls are in their proper (reset) position.

2. Service number selection

Once in the service mode, press the Ch-up or Ch-down button on the remote controller or at the set. The service adjustment number will vary in increments of one, from "S01" to "OP". Select the item you wish to adjust.

3. Data number selection

Press the Vol-up or down button to adjust the data number.

To enter the service mode and exit service mode.

While pressing the Vol-up and Ch-up buttons at the sametime, plug the AC cord into a wall socket. Now the TV set is switched on and enters the service mode.

To exit the service mode, turn the television off by pressing the power button.

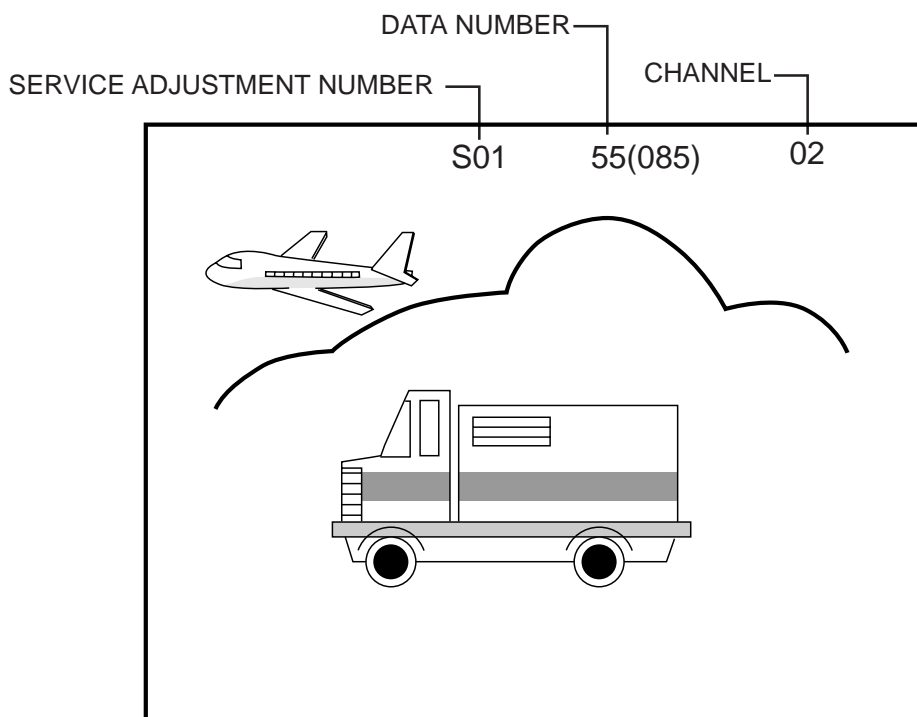


Figure A.

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		ADJUSTMENT CONTENTS
		INITIAL VALUE	RANGE	
S01	PICTURE	55	00-7F	
S02	TINT	46	00-7F	
S03	COLOR	32	00-7F	
S04	BRIGHTNESS	40	00-7F	
S05	SHARPNESS	28	00-3F	Must be set to "24"
S06	VERTICAL PHASE	00	00-07	Must be set between "0" and "03"
S07	HORIZONTAL PHASE	12	00-1F	
S08	RF-AGC	23	00-3F	
S09	VERTICAL AMP	20	00-3F	
S10	VCO	2C	00-7F	
S11	R CUT-OFF	00	00-FF	
S12	G CUT -OFF	00	00-FF	
S13	B CUT-OFF	00	00-FF	
S14	G GAIN	7F	00-FF	
S15	B GAIN	7F	00-FF	
S16	TRAP(3.58MHz)	00	00 or 01	Must be set to "00"
S17	BALANCE	20	00-3F	Must be set to "20"
S18	C.C.POSITION	17	00-7F	
S19	Y-MUTE	00	00,01,03	"00"=NORMAL, "01"=No Y, "03"=No VERTICAL
S20	ENERGY SAVE OFFSET	20	00-3F	Must be set to "23"
S21	D.D.E. OFFSET	03	00-1F	Must be set to "03"
S22	OSD SETUP	00	00-03	Must be set to "00"
S23	TUNER SETUP	00	00-01	Must be set to "00"
OP	OPTION	30	00-FF	Must be set to "02"

Table - A

Holding down both the Ch-up/down buttons on the TV set at service mode for more than 2 seconds will automatically write the above initial values into IC2101.

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
IC2001		X	Data is stored in IC2101.
IC201	X		The adjustment is needed to compensate for characteristics of parts including IC201.
IC2101	X		Holding down both the Ch-up/down buttons on the TV set in the service mode for more than 2 seconds will automatically write the above initial values into IC2101.
CRT	X		Adjust items related to picture tube only.

Table - B

■ SERVICE ADJUSTMENT

VCO Adjustment

1. Connect a digital voltmeter between pin (44) of IC201 and ground.
2. Select a good local channel.
3. Enter the service mode and select the service adjustment "S10".
4. Adjust the data so that digital voltmeter reads 2.2V.
5. Adjustment is completed, remove the voltmeter, return to "normal" mode.

RF AGC Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S08".
3. Set the data value to point where no noise or beat appears.
4. Select another channel to confirm that no noise or beat appears.

Note 1 : You will have to come out of the service mode to select another channel.

Note 2 : Setting the data to "00" will produce a black raster.

Screen Adjustment

1. Connect a digital voltmeter between TP852 and TP853 on the CRT Unit.
Note: These test points may not be provided.
Then connect the voltmeter to both ends of R852 located near Q852 on the foil side.
2. Receive a good local channel.
3. Enter the service mode and select the service adjustment "S03" and set the data value to "00" to set the color level to minimum (Record original data code under adjustment "S03" before changing). You may skip this step, if you selected a B/W picture or monoscope pattern.
4. Select the service adjustment "S19" and adjust the data value to "01", this turn off the luminance signal (Y-mute).
5. Select the service adjustment "S04" and adjust data value to obtain 0.17 volts on the digital voltmeter.
6. Adjust the master screen control until the raster darkens to the point where raster is barely seen.
7. Adjust the service adjustments "S11" red, "S12" green and "S13" blue to obtain a good grey scale with normal whites at low brightness level.
8. Select the service adjustment "S19" and reset data to "00". Select the service adjustment "S03" and reset data to obtain normal color level.
9. Remove digital voltmeter, and reset the master screen control to obtain normal brightness range.

White Balance Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S03" and set to "00" (minimum color). "S03" does not have to be adjusted, if you selected a B/W picture or monoscope pattern.
3. Alternately adjust the service adjustment data of "S14" and "S15" until a good grey scale with normal whites is obtained.
4. Select the service adjustment "S03" and adjust data to obtain normal color level.

Sub-Picture Adjustment

1. Receive a good local channel.
2. Make sure the customer picture control is set to maximum.
3. Enter the service mode and select the service adjustment "S01".
4. Adjust the data value to achieve normal contrast range.

Sub-Tint Adjustment

1. Receive a good local channel.
2. Set customer tint control to center of it's range.
3. Enter the service mode and select the service adjustment "S02".
4. Adjust "S02" data value to obtain normal flesh tones.

Sub-Color Adjustment

1. Receive a good local channel.
2. Make sure the customer color control is set to center position .
3. Enter the service mode and select the service adjustment "S03".
4. Adjust "S03" data value to obtain normal color level.

Sub-Brightness Adjustment

1. Receive a good local channel.
2. Make sure the customer brightness control is set to center position.
3. Enter the service mode and select the service adjustment "S04".
4. Adjust "S04" data value to obtain normal brightness level.

Vertical-Size Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S09".
3. While observing the top and bottom of the screen, adjust "S09" data value to proper vertical size.

Vertical Phase Adjustment

1. Enter the service mode and select the service adjustment "S06".
2. Adjust data value to "00"~"03" so that picture is approximate center.
Note: This must be set "00"~"03" when adjust another data retrace line will be appear.

Horizontal Position Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S07".
3. Adjust "S07" data value so that picture is centered.

Caption Position Adjustment (Horizontal)

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S18".
3. A black text box appears on the screen. (see **Figure B.** below)
4. Adjust "S18" data value so that text box is positioned in the center of the screen.

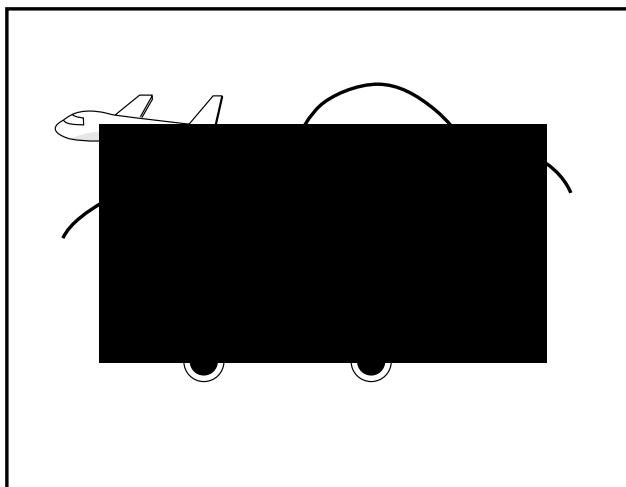


Figure B.

3.58MHz Trap Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S16".
3. This is a two position adjustment, "00" is ON, "01" is OFF.
4. Adjust data value to "00" for normal viewing.

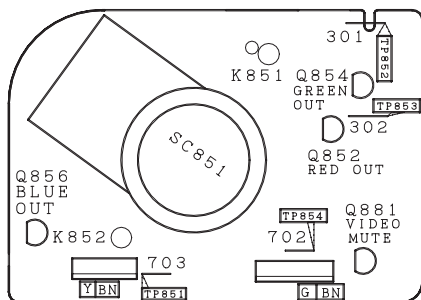
Sharpness, Audio Balance, Energy Save Offset, DDE Offset, OSD Setup, Tuner Setup and Option Adjustments

1. Receive a good local channel.
2. Enter the service mode and select the service adjustments "S05" for sharpness, "S17" for balance, "S20" for energy save offset, "S21" for DDE offset, "S22" for OSD setup, "S23" for tuner and "OP" for option.
 - **Sharpness Adjustment**
 - 3. Adjust data value to "24" (center of data range) for sharpness adjustment.
 - **Audio Balance Adjustment**
 - 4. Adjust data value to "20" (center of data range) for Audio balance adjustment.
 - **Energy Save Offset Adjustment**
 - 5. Adjust data value to "23".
 - **DDE Offset Adjustment**
 - 6. Adjust data value to "03".
 - **OSD Setup Adjustment**
 - 7. Adjust data value to "00".
 - **Tuner Setup Adjustment**
 - 8. Adjust data value to "00".
 - **Option Adjustment**
 - 9. Adjust data value to "02".

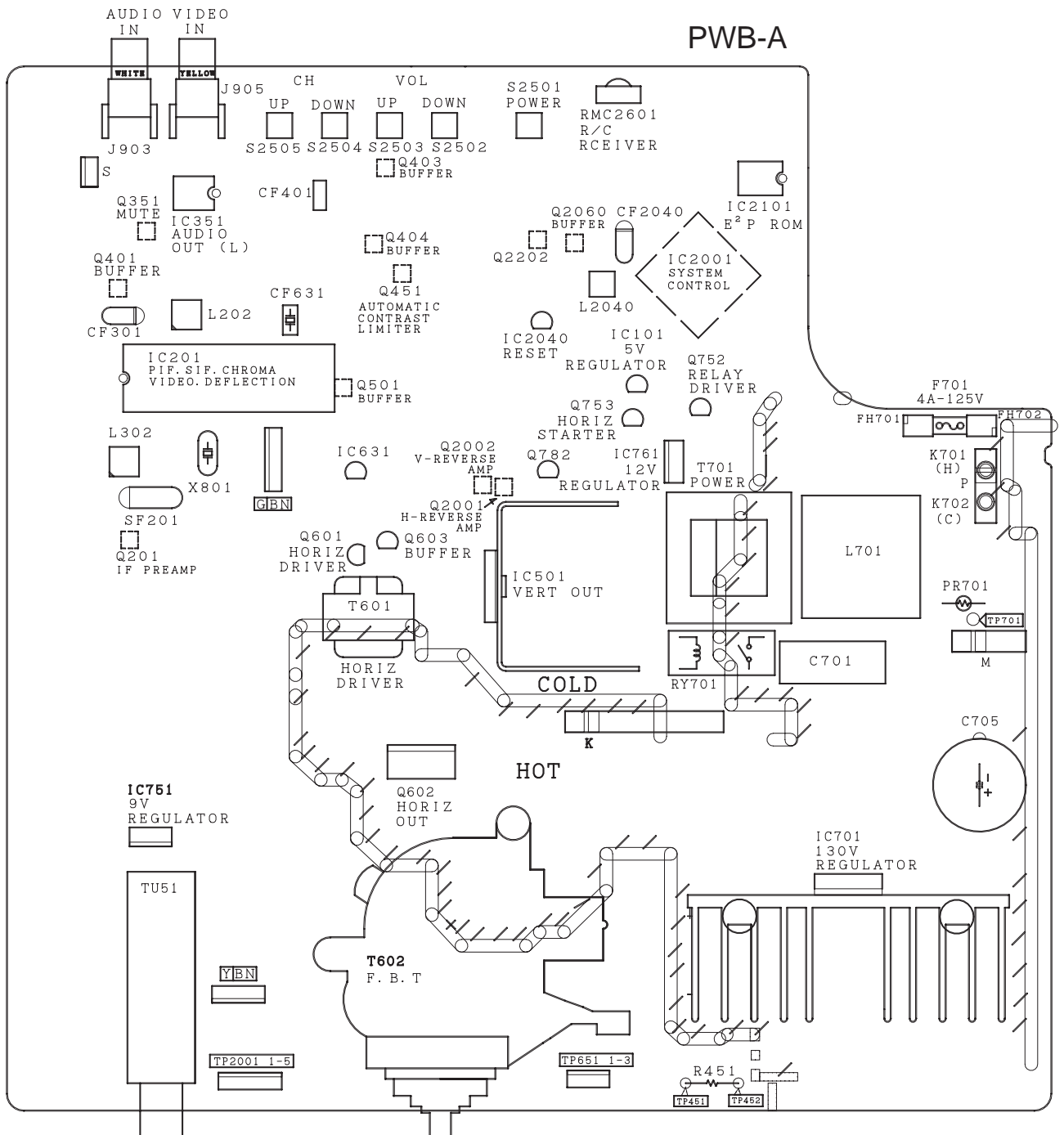
CHASSIS LAYOUT

H
G
F
E
D
C
B
A

PWB-B

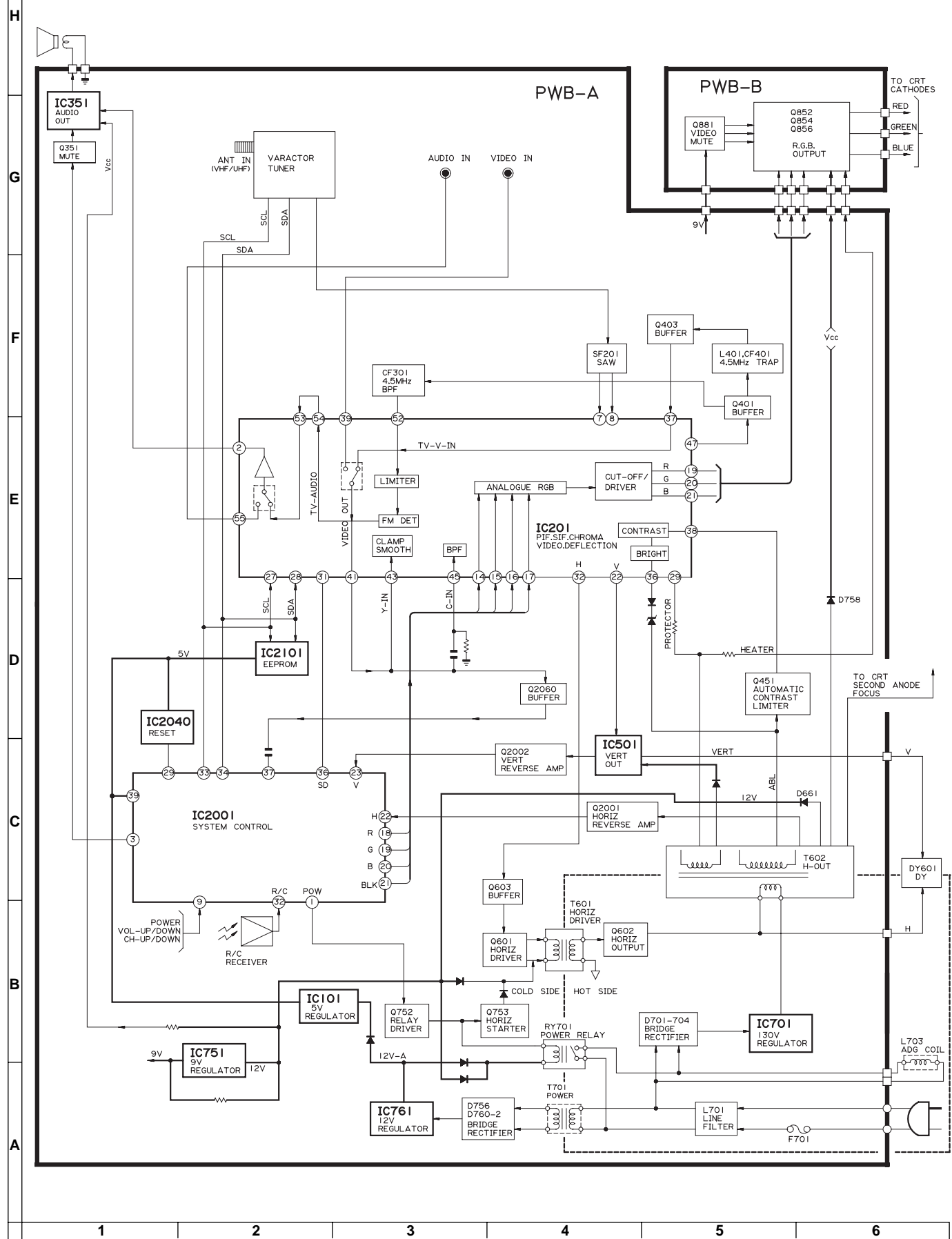


PWB-A



1 2 3 4 5 6

BLOCK DIAGRAM



DESCRIPTION OF SCHEMATIC DIAGRAM

NOTES:

1. The unit of resistance "ohm" is omitted.
($K=k\Omega=1000\Omega$, $M=M\Omega$)
2. All resistors are 1/8 watt, unless otherwise noted.
3. All capacitors are μF , unless otherwise noted.
($P=pF=\mu\mu F$)
4. (G) indicates $\pm 2\%$ tolerance may be used.
5. \perp indicates line isolated ground.
6. \downarrow indicates hot ground.

VOLTAGE MEASUREMENT CONDITIONS:

1. All DC voltages are measured with DVM connected between points indicated and chassis ground, line voltage set at 120V AC and all controls set for normal picture unless otherwise indicated.
2. All voltages measured with 1000 μ V B & W or Color signal.

WAVEFORM MEASUREMENT CONDITIONS:

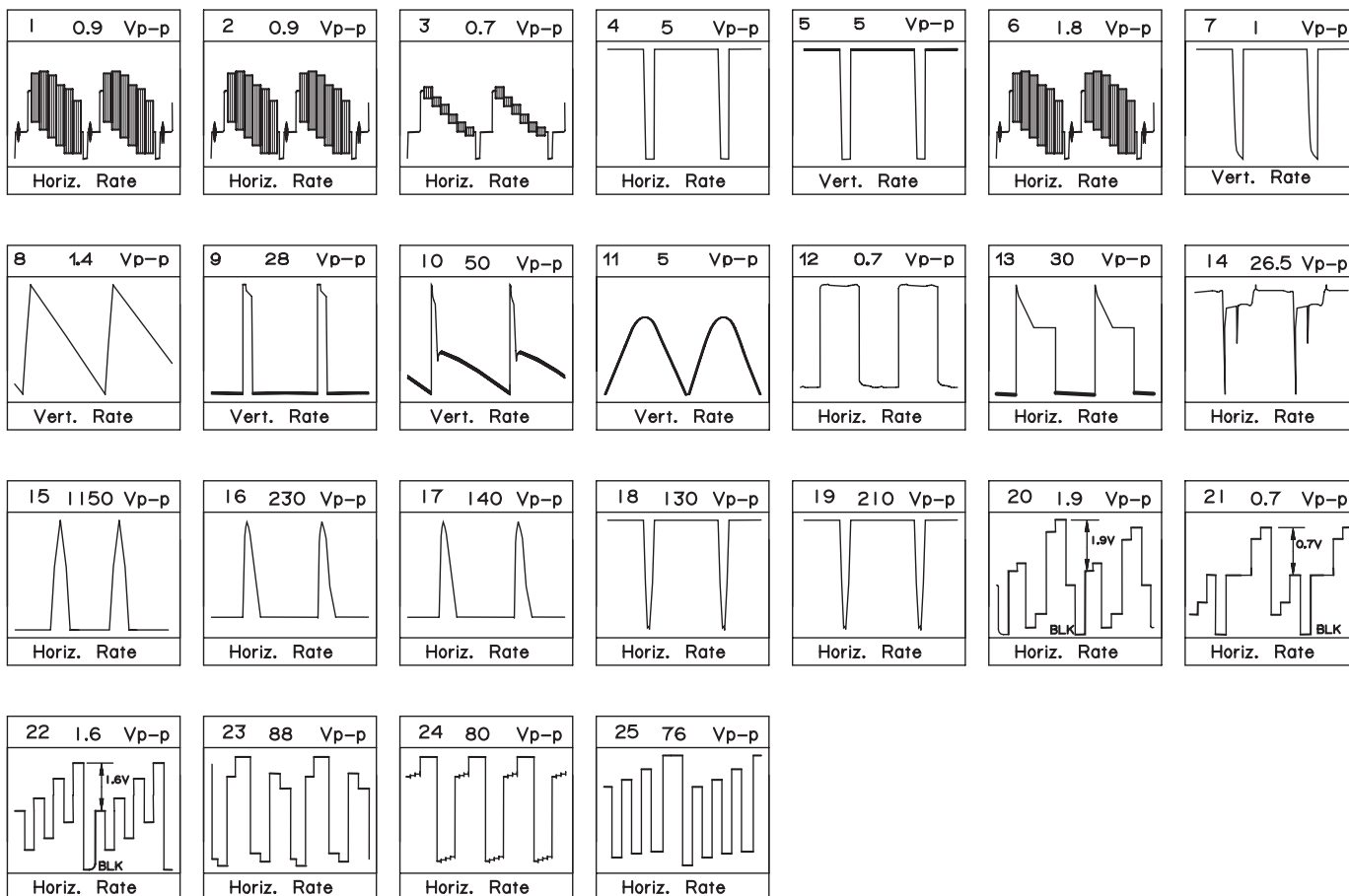
1. Photographs taken on a standard gated color bar signal, the tint setting adjusted for proper color. The wave shapes at the red, green and blue cathodes of the picture tube depend on the tint, color level and picture control.
2. \odot indicates waveform check points (See chart, waveforms are measured from point indicated to chassis ground.)

\triangle AND SHADED () COMPONENTS = SAFETY RELATED PARTS.
 \blacktriangle MARK= X-RAY RELATED PARTS.

DRGANNES MARQUES \triangle ET HACHRES ():
 PIECES RELATIVES A LA SECURITE.
 MARQUE \blacktriangle : PIECES RELATIVE AUX RAYONS X.

This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.

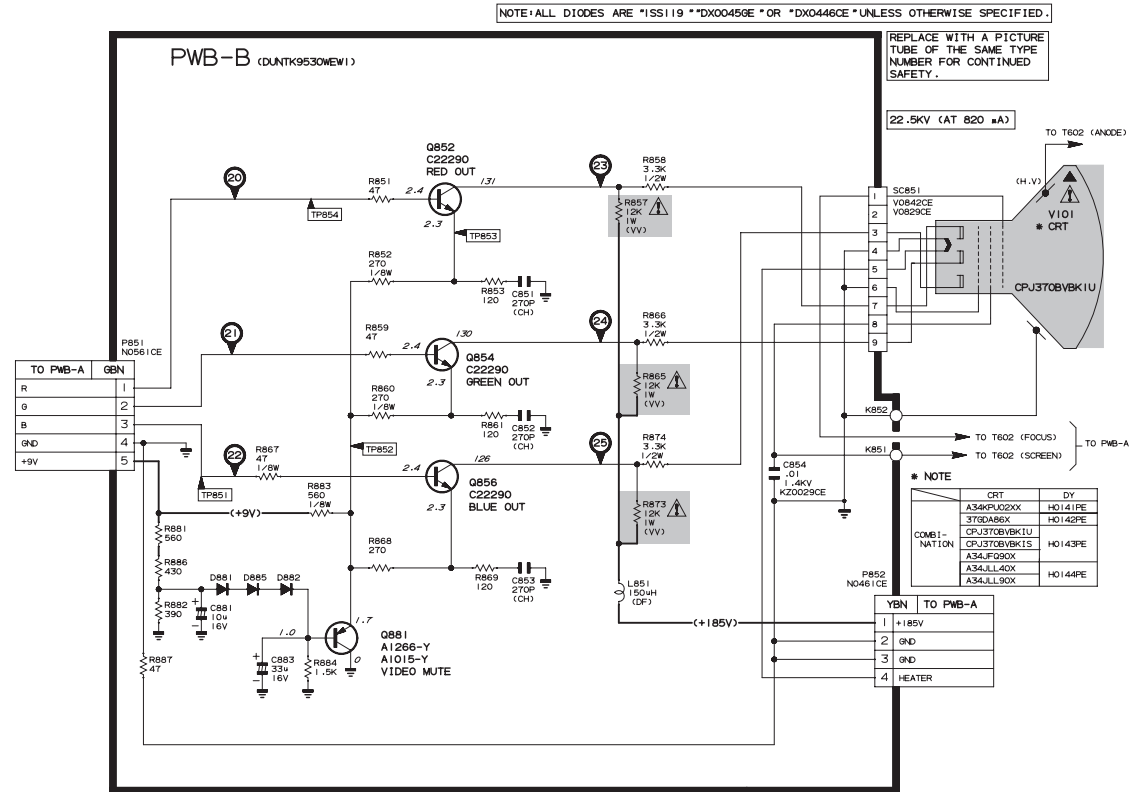
WAVEFORMS



SCHEMATIC DIAGRAM: CRT Unit

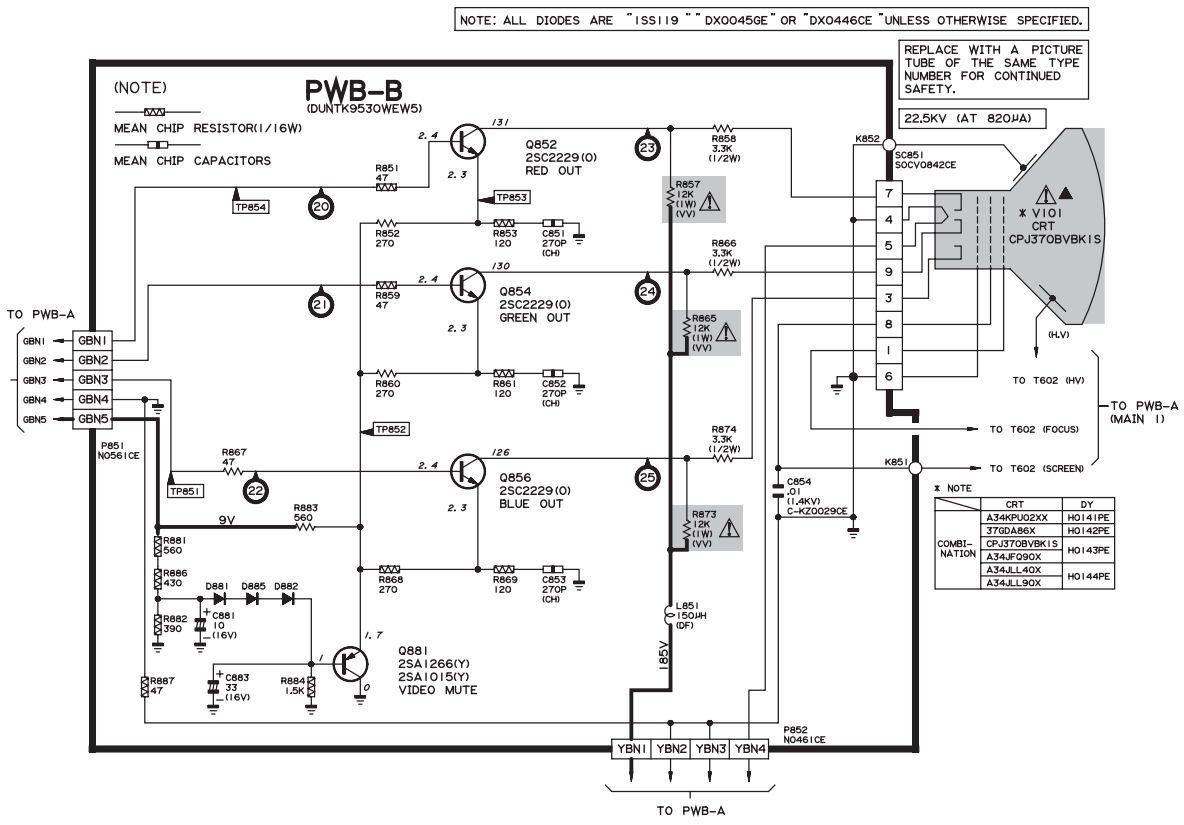
13L-M100/150, CL13M10/15

H
G
F
E
D
C
B
A



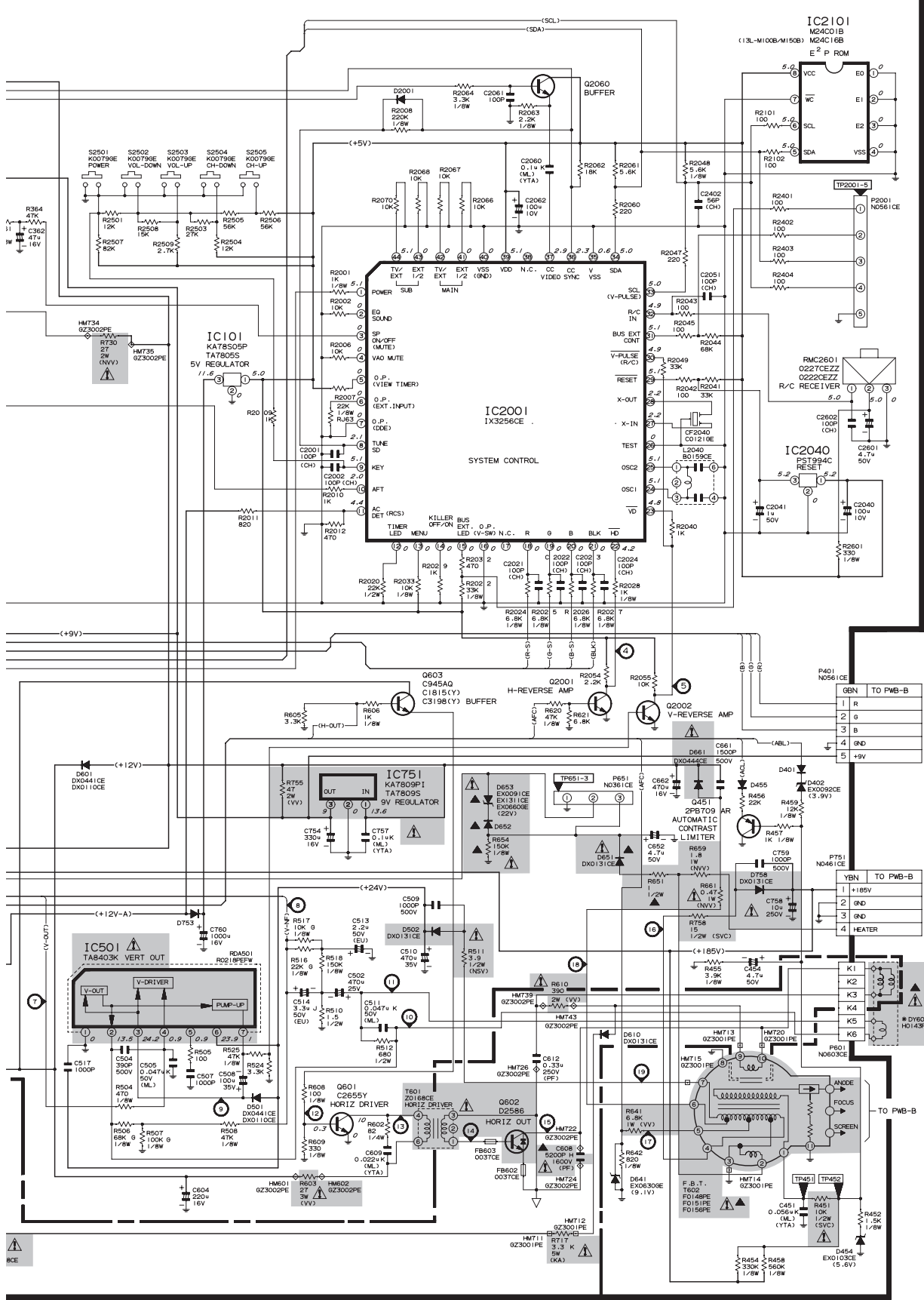
14ML10

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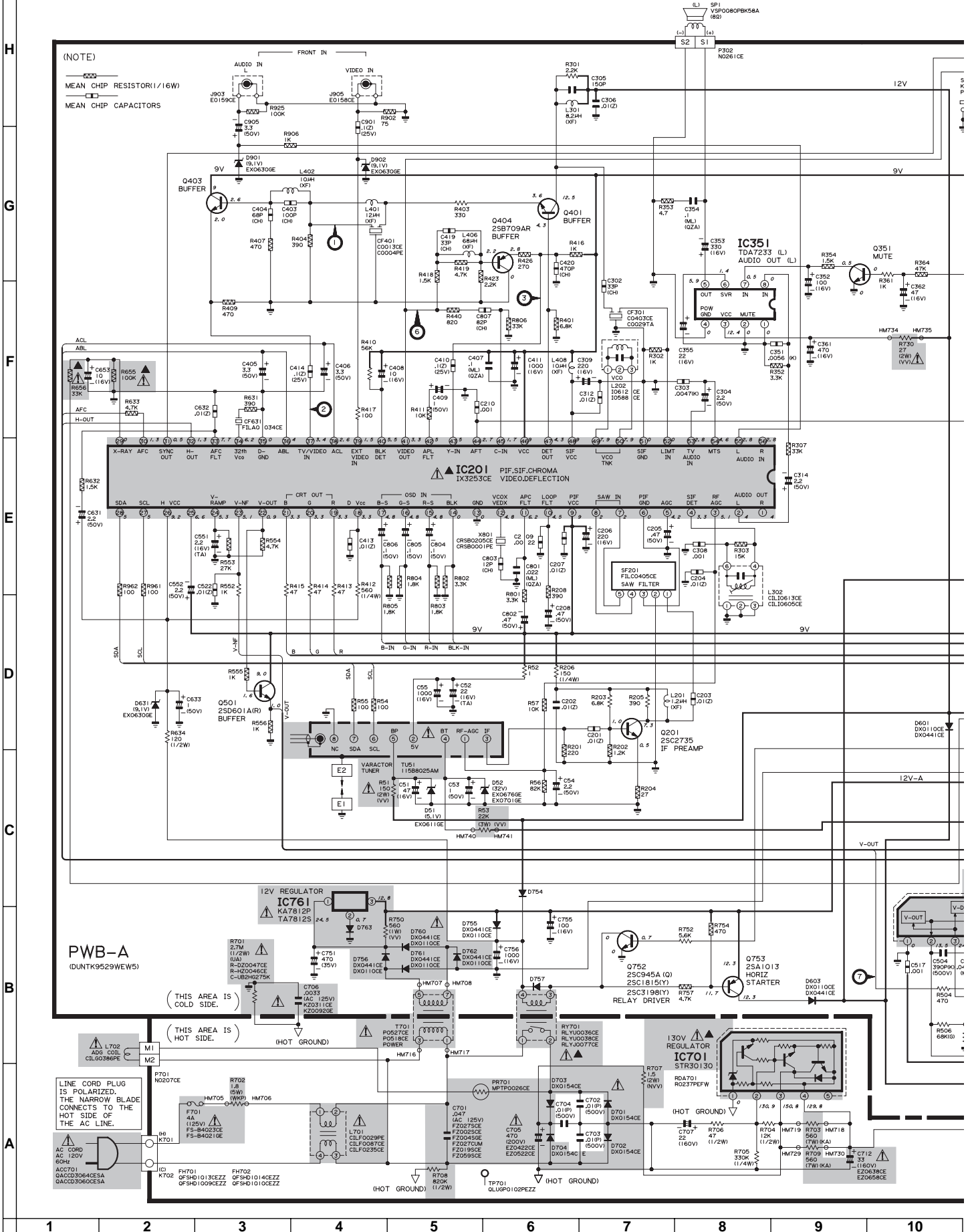
1 2 3 4 5 6

NOTE: ALL DIODES ARE *1SS119* UNLESS OTHERWISE SPECIFIED.
*ALL TRANSISTORS ARE *2SC2462* OR *2PD601A* UNLESS OTHERWISE SPECIFIED.

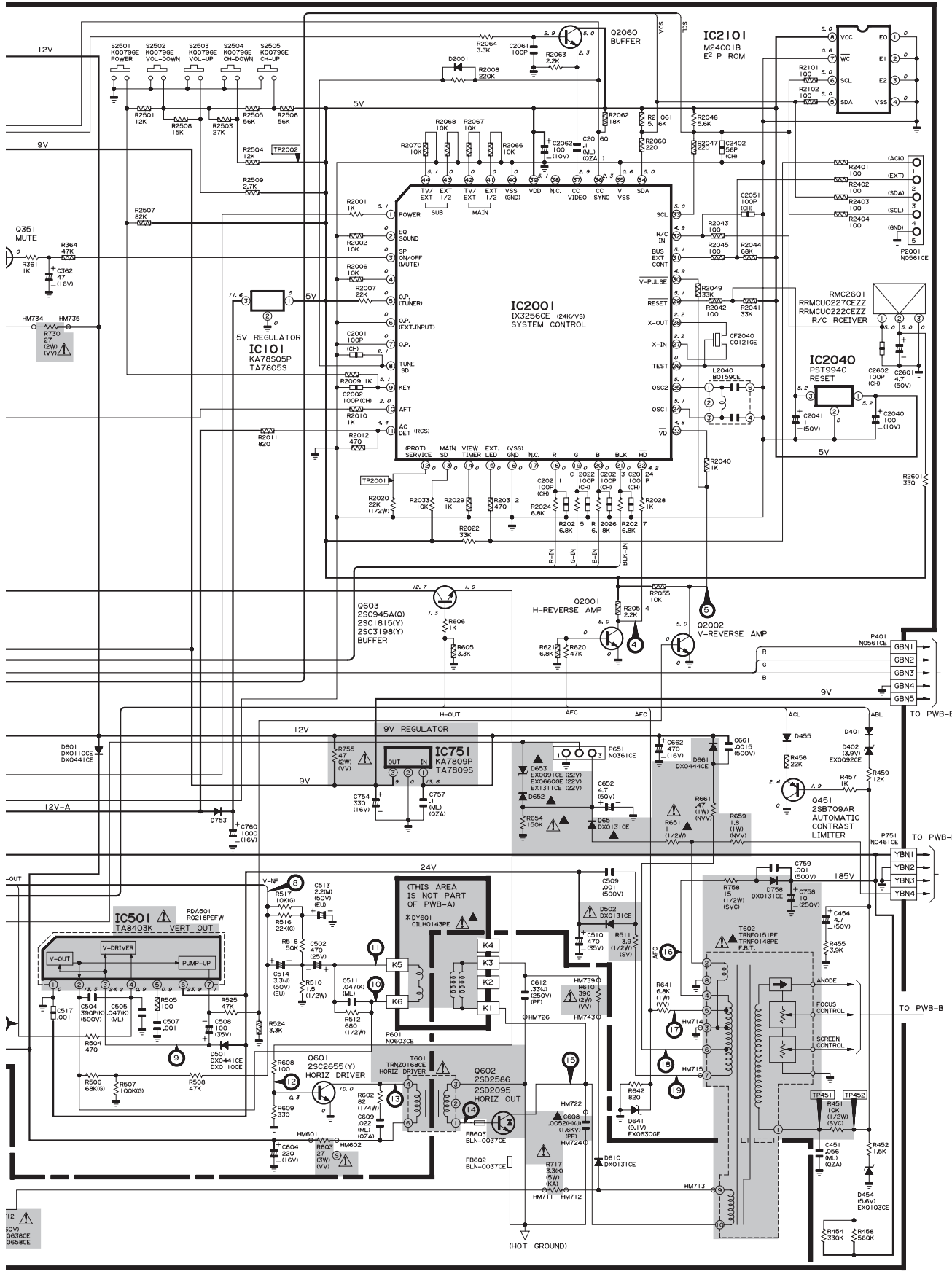


10	11	12	13	14	15	16	17	18	19
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MODEL 14ML10 SCHEMATIC DIAGRAM: MAIN Unit



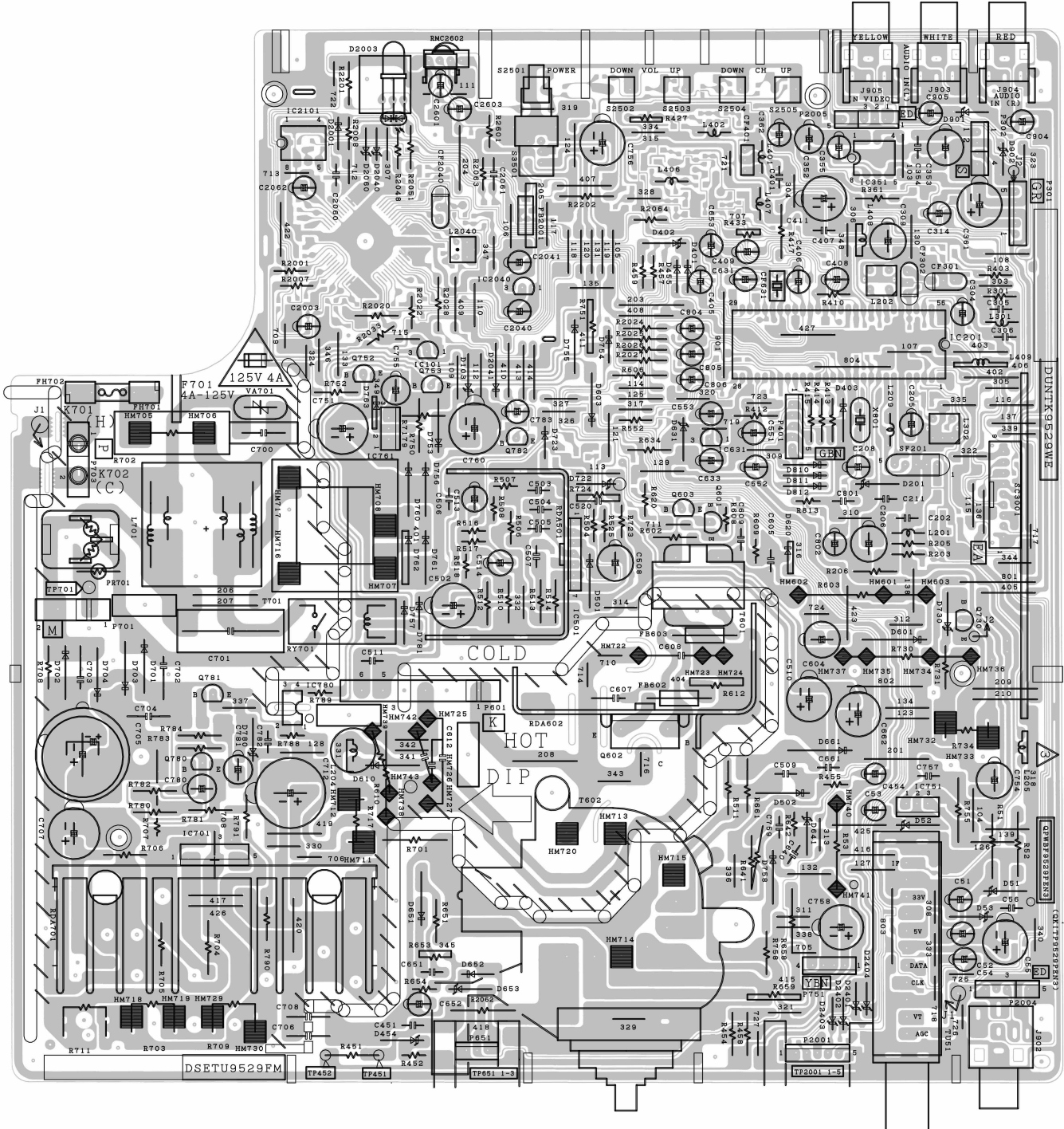
NOTE: ALL DIODES ARE "1SS119" "DX045GE" OR "DX044CE" UNLESS OTHERWISE SPECIFIED.
ALL TRANSISTORS ARE "2SC2462" OR "2SD601AR" UNLESS OTHERWISE SPECIFIED.



10	11	12	13	14	15	16	17	18	19
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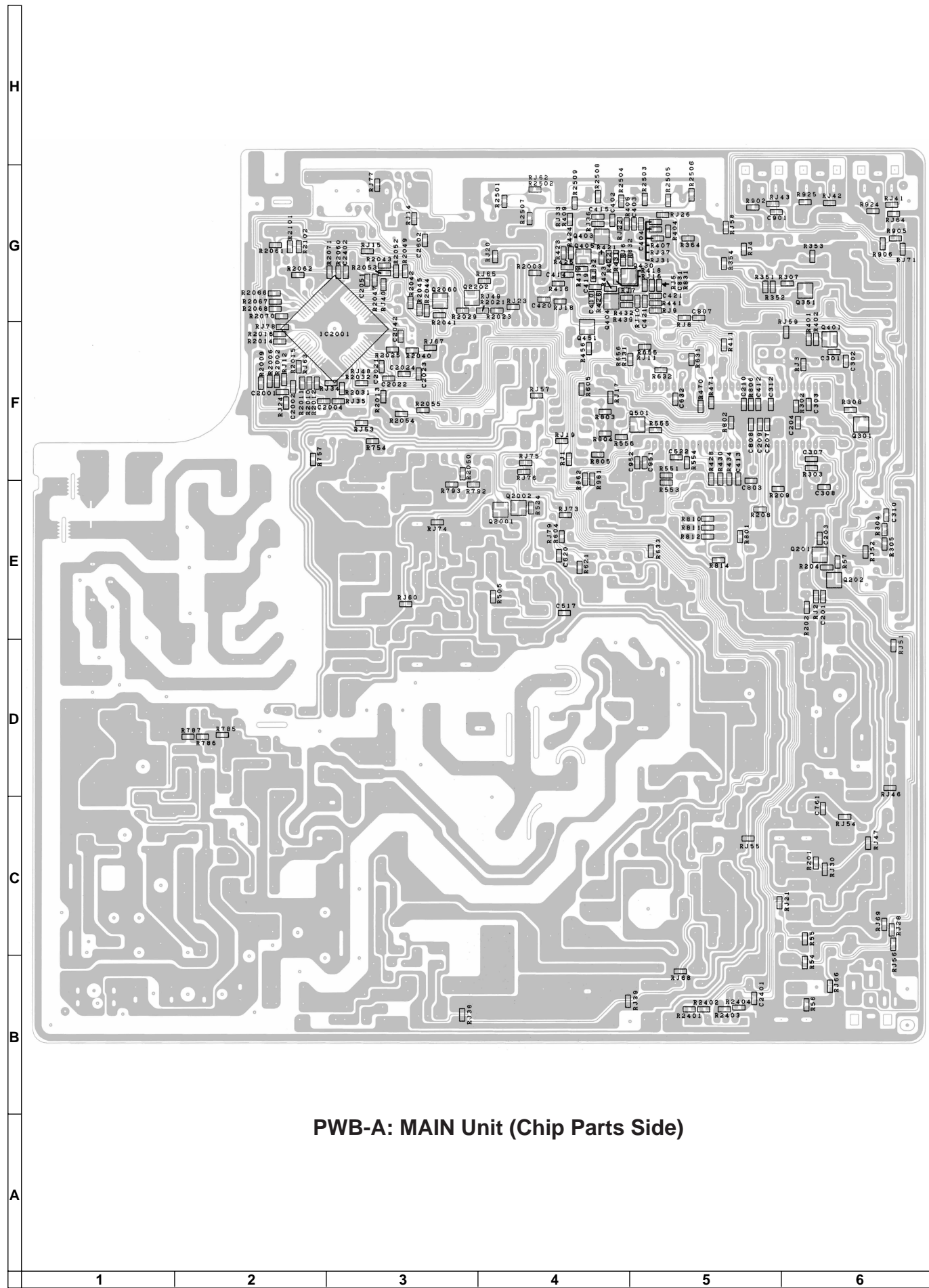
PRINTED WIRING BOARD ASSEMBLIES

H
G
F
E
D
C
B
A



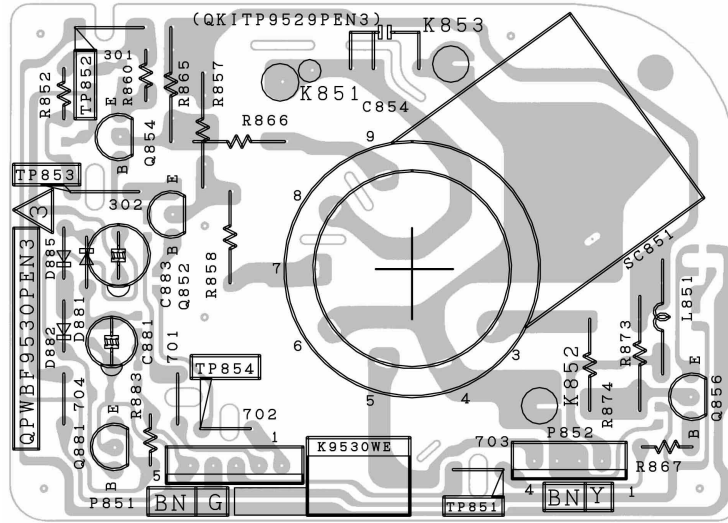
PWB-A: MAIN Unit (Wiring Side)

1 2 3 4 5 6

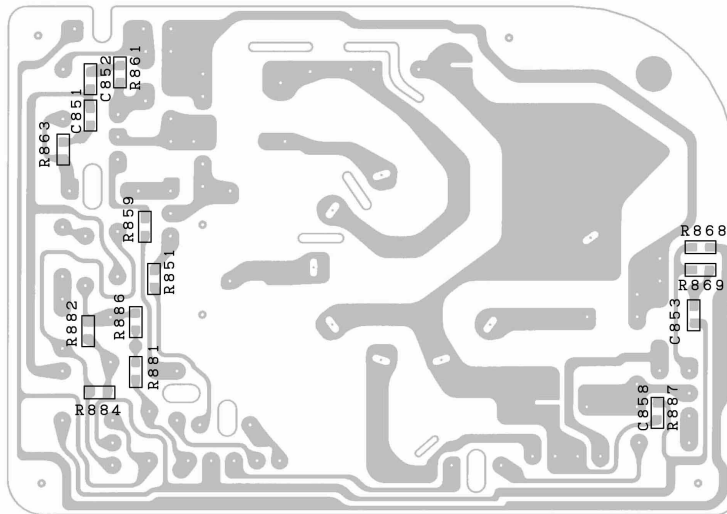


PWB-A: MAIN Unit (Chip Parts Side)

H
 G
 F
 E
 D
 C
 B
 A



PWB-B: CRT Unit (Wiring Side)



PWB-B: CRT Unit (Chip Parts Side)

1 2 3 4 5 6

PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual; electrical components having such features are identified by Δ and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does not have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |

in **USA**: Contact your nearest SHARP Parts Distributor to order. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK : SPARE PARTS-DELIVERY SECTION

▲ MARK : X-RAY RELATED PARTS

Ref. No.	Part No.	★	Description	Code
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PICTURE TUBE

▲△ V101	VB370BVBK1S-S or VB370BVBK1U-S or VB34JFQ90X/*S or VB34KPU02X/*S or VB34JLL40X/*S or VB34JLL90X/*S or VB37GDA86X/1E	R	CRT(DY601: H0143PE) CRT(DY601: H0143PE) CRT(DY601: H0143PE) CRT(DY601: H0141PE) CRT(DY601: H0144PE) CRT(DY601: H0144PE) CRT(DY601: H0142PE)	BZ
▲△ DY601	RCiLH0141PEZZ or RCiLH0142PEZZ or RCiLH0143PEZZ or RCiLH0144PEZZ	R	DY(CRT: A34KPU02XX) DY(CRT: 37GDA86X) DY(CRT: CPJ370BVBK1U or CPJ370BVBK1S or A34JFQ90X) DY(CRT: A34JLL40X or A34JLL90X)	BA
△ L703	RCiLG0386PEZZ PMAGF3041CEZZ PSPAG0004PEZZ QEARC1423PEZZ	R J R R	Degaussing Coil Magnet Ass'y -Purity and Static Convergence Wedge (Gum), Yoke Grounding Strap	AK AG AC AG

	CRT		DY	
	COMBI-NATION	A34KPU02XX	H0141PE	37GDA86X
CPJ370BVBK1U		H0143PE	CPJ370BVBK1S	H0144PE
A34JFQ90X				
A34JLL40X				
A34JLL90X				

LISTE DES PIÈCES

CHANGE DES PIÈCES

Les pièces de rechange qui présentent ces caractéristiques spéciales de sécurité, sont identifiées dans ce manuel : les pièces électriques qui présentent ces particularités, sont repérées par la marque Δ et sont hachurées dans les listes de pièces et dans les diagrammes schématisés.

La substitution d'une pièce de rechange par une autre qui ne présente pas les mêmes caractéristiques de sécurité que la pièce recommandée par l'usine et dans ce manuel de service, peut provoquer une électrocution, un incendie ou tout autre sinistre.

"COMMENT COMMANDER LES PIÈCES DE RECHANGE"

Pour que votre commande soit rapidement et correctement remplie, veuillez fournir les renseignements suivants.

- | | |
|---------------------|----------------|
| 1. NUMERO DU MODELE | 2. NO. DE REF |
| 3. NO. DE PIECE | 4. DESCRIPTION |

in **CANADA**: Contact SHARP Electronics of Canada Limited Phone (416) 890-2100

★ MARQUE : SECTION LIVRAISON DES PIÈCES DE RECHANGE

▲ MARQUE : PIÈCES RELATIVE AUX RAYONS X

Ref. No.	Part No.	★	Description	Code
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PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

PWB-A DUNTK9529WEW1	–	MAIN Unit (13L-M100/150)	—
PWB-A DUNTK9529WEW3	–	MAIN Unit (CL13M10/15)	—
PWB-A DUNTK9529WEW5	–	MAIN Unit (14ML10)	—
PWB-B DUNTK9530WEW1	–	CRT Unit (13L-M100/150, CL13M10/15)	—
PWB-B DUNTK9530WEW5	–	CRT Unit (14ML10)	—

PWB-A : DUNTK9529WEW1(13L-M100/150) PWB-A : DUNTK9529WEW3(CL13M10/15) MAIN UNIT

TUNER

NOTE : THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

△ TU51	VTUVTST5UF78S	M	Tuner	AX
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INTEGRATED CIRCUITS

IC101	VHiKA78S05P-1 or VHiTA7805S/-1	M	KA78S05P	AD
▲△ IC201	RH-iX3253CEZZ	J	TA1268AN	AV
IC351	VHiTDA7233/-1	J	TDA7233	AF
△ IC501	VHiTA8403K/-1	J	TA8403K	AL
▲△ IC701	VHiSTR301301E	J	STR30130	AP
△ IC751	VHiKA7809Pi-1 or VHiTA7809S/-1	R	KA7809PI	AE
△ IC761	VHiKA7812Pi-1 or VHiTA7812S/-1	R	KA7812PI	AE
IC2001	RH-iX3256CEZZ	J	TMPA8701CMF142	AX
IC2040	VHiPST994C/-1	J	PST994C	AD
IC2101	VHiM24C01B/-1	J	M24C01-BN6	AF

TRANSISTORS

You can substitute "VS2SC2462-C-1" for "VS2PD601AR/-1".

Q201	VS2SC2735/1E	J	2SC2735	AC
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Ref. No.	Part No.	★	Description	Code
PWB-A : DUNTK9529WEW1(13L-M100/150)				
PWB-A : DUNTK9529WEW3(CL13M10/15)				
MAIN UNIT (Continued)				
Q351	VS2PD601AR/-1	J	2PD601AR	AB
Q401	VS2PD601AR/-1	J	2PD601AR	AB
Q403	VS2PD601AR/-1	J	2PD601AR	AB
Q404	VS2PB709AR/-1	J	2PB709AR	AB
Q451	VS2PB709AR/-1	J	2PB709AR	AB
Q501	VS2PD601AR/-1	J	2PD601AR	AB
Q601	VS2SC2655Y/-1	J	2SC2655Y	AE
△ Q602	VS2SD2586//1E	J	2SD2586	AM
Q603	VS2SC945AQ/-1	J	2SC945A(Q)	AB
	or			
	VS2SC1815YW-1			
	or			
	VS2SC3198-Y-1			
Q752	VS2SC945AQ/-1	J	2SC945A(Q)	AB
	or			
	VS2SC1815YW-1			
	or			
	VS2SC3198-Y-1			
Q753	VS2SA1013//1E	J	2SA1013	AD
Q2001	VS2PD601AR/-1	J	2PD601AR	AB
Q2002	VS2PD601AR/-1	J	2PD601AR	AB
Q2060	VS2PD601AR/-1	J	2PD601AR	AB
DIODES				
D51	RH-EX0611GEZZ	J	Zener Diode, 5.1V	AA
D52	RH-EX0676GEZZ	J	Zener Diode, 32V	AA
D53	RH-EX0611GEZZ	J	Zener Diode, 5.1V	AA
D401	VHD1SS119//1	J	Diode	AB
D402	RH-EX0092CEZZ	J	Zener Diode, 3.9V	AB
D454	RH-EX0103CEZZ	J	Zener Diode, 5.6V	AB
D455	VHD1SS119//1	J	Diode	AB
D501	RH-DX0441CEZZ	J	Diode	AC
	or			
	RH-DX0110CEZZ			
△ D502	RH-DX0131CEZZ	J	Diode	AC
D601	RH-DX0441CEZZ	J	Diode	AC
	or			
	RH-DX0110CEZZ			
D603	RH-DX0441CEZZ	J	Diode	AC
	or			
	RH-DX0110CEZZ			
D610	RH-DX0131CEZZ	J	Diode	AC
D631	RH-EX0630GEZZ	J	Zener Diode, 9.1V	AA
D641	RH-EX0630GEZZ	J	Zener Diode, 9.1V	AA
▲▲ D651	RH-DX0131CEZZ	J	Diode	AC
▲▲ D652	VHD1SS119//1	J	Diode	AB
▲▲ D653	RH-EX0091CEZZ	J	Zener Diode, 22V	AB
	or			
	RH-EX0660GEZZ			
	or			
	RH-EX1311CEZZ			
△ D661	RH-DX0444CEZZ	J	Diode	AH
△ D701	RH-DX0154CEZZ	J	Diode	AC
△ D702	RH-DX0154CEZZ	J	Diode	AC
△ D703	RH-DX0154CEZZ	J	Diode	AC
△ D704	RH-DX0154CEZZ	J	Diode	AC
D753	VHD1SS119//1	J	Diode	AB
D754	VHD1SS119//1	J	Diode	AB
D755	RH-DX0441CEZZ	J	Diode	AC
	or			
	RH-DX0110CEZZ			
△ D756	RH-DX0441CEZZ	J	Diode	AC
	or			
	RH-DX0110CEZZ			
D757	VHD1SS119//1	J	Diode	AB
△ D758	RH-DX0131CEZZ	J	Diode	AC
△ D760	RH-DX0441CEZZ	J	Diode	AC
	or			
	RH-DX0110CEZZ			
△ D761	RH-DX0441CEZZ	J	Diode	AC
	or			
	RH-DX0110CEZZ			

Ref. No.	Part No.	★	Description	Code
△ D762	RH-DX0441CEZZ	J	Diode	AC
	or			
	RH-DX0110CEZZ			
D763	VHD1SS119//1	J	Diode	AB
D901	RH-EX0630GEZZ	J	Zener Diode, 9.1V	AA
D902	RH-EX0630GEZZ	J	Zener Diode, 9.1V	AA
D2001	VHD1SS119//1	J	Diode	AB
PACKAGED CIRCUITS				
△ PR701	RMPTP0026CEZZ	J	Packaged Circuit	AF
X801	RCRSB0205CEZZ	R	Crystal	AF
	or			
	RCRSB0001PEZZ			
FILTERS				
CF301	RFiLC0403CEZZ	J	Ceramic Filter	AE
	or			
	RFiLC0029TAZZ			
CF401	RFiLC0013CEZZ	J	Ceramic Filter	AE
	or			
	RFiLC0004PEZZ			
CF631	RFiLA0034CEZZ	J	Ceramic Filter	AD
CF2040	RFiLC0121GEZZ	J	Ceramic Filter	AD
SF201	RFiLC0405CEZZ	J	SAW Filter	AH
COILS				
L201	VP-XF1R2K0000	J	Peaking 1.2μH	AB
L202	RCiLi0612CEZZ	J	IF Coil	AE
	or			
	RCiLi0588CEZZ			
L301	VP-XF8R2K0000	J	Peaking 8.2μH	AB
L302	RCiLi0613CEZZ	J	VCO Coil	AE
L401	VP-XF120K0000	J	Peaking 12μH	AB
L402	VP-XF100K0000	J	Peaking 10μH	AB
L406	VP-XF680K0000	J	Peaking 68μH	AB
L408	VP-XF100K0000	J	Peaking 10μH	AB
△ L701	RCiLF0029PEZZ	R	Coil	AH
	or			
	RCiLF0087CEZZ			
	or			
	RCiLF0235CEZZ			
L2040	RCiLB0159CEZZ	J	Oscillation Coil	AE
TRANSFORMERS				
△ T601	RTRNZ0168CEZZ	J	Transformer	AH
▲▲ T602	RTRNF0148PEZZ	R	H-Volt Transformer	BD
	or			
	RTRNF0151PEZZ			
	or			
	RTRNF0156PEZZ			
△ T701	RTRNP0527CEZZ	J	Power Transformer	AM
	or			
	RTRNP0518CEZZ			
CAPACITORS				
<i>[EL... Electrolytic, M-Poly... Metalized Polypro Film]</i>				
C51	VCEA0A1CW476M	J	47 16V EL.	AB
C52	VCSATA1CE226K	J	22 16V Tantalum	AD
C53	VCEA0A1HW105M	J	1.0 50V EL.	AB
C54	VCEA0A1HW475M	J	4.7 50V EL.	AB
C55	VCEA0A1CW477M	J	470 16V EL.	AC
C201	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C202	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C203	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C204	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C205	VCEA0A1HW474M	J	0.47 50V EL.	AB
C206	VCEA0A1CW227M	J	220 16V EL.	AC
C207	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C208	VCEA0A1HW474M	J	0.47 50V EL.	AB
C209	VCKYCY1HB222K	J	2200p 50V Ceramic	AA
C210	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C302	VCCCCY1HH330J	J	33p 50V Ceramic	AA
C303	VCKYCY1HB472K	J	4700p 50V Ceramic	AA
C304	VCEA0A1HW225M	J	2.2 50V EL.	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A : DUNTK9529WEW1(13L-M100/150)					PWB-A : DUNTK9529WEW3(CL13M10/15)				
MAIN UNIT (Continued)									
C305	VCKYPA1HB151K	J	150p 50V Ceramic	AA	△ C706	RC-KZ0092GEZZ	J	0.0033 AC125V Ceramic	AC
C306	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA		or			
C308	VCKYCY1HB102K	J	1000p 50V Ceramic	AA		RC-KZ0311CEZZ			
C309	VCEA0A1CW227M	J	220 16V EL.	AC	C707	VCEAGA2CW226M	J	22 160V EL.	AD
C312	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	△ C712	RC-EZ0638CEZZ	J	33 160V EL.	AG
C314	VCEA0A1HW225M	J	2.2 50V EL.	AB	C751	VCEA0A1VW477M	J	470 35V EL.	AB
C351	VCKYCY1HB562K	J	5600p 50V Ceramic	AA	C754	VCEA0A1CW337M	J	330 16V EL.	AC
C352	VCEA0A1CW107M	J	100 16V EL.	AC	C755	VCEA0A1CW107M	J	100 16V EL.	AC
C353	VCEA0A1CW337M	J	330 16V EL.	AC	C756	VCEAGA1CW108M	J	1000 16V EL.	AD
C354	VCQYTA1HM104K	J	0.1 50V Mylar	AC	C757	VCQYTA1HM104K	J	0.1 50V Mylar	AC
C355	VCEA0A1CW226M	J	22 16V EL.	AB	△ C758	VCEAGA2EW106M	J	10 250V EL.	AC
C361	VCEA0A1CW477M	J	470 16V EL.	AC	C759	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
C362	VCEA0A1CW476M	J	47 16V EL.	AB	C760	VCEAGA1CW108M	J	1000 16V EL.	AD
C403	VCCCCY1HH101J	J	100p 50V Ceramic	AA	C801	VCQYTA1HM223K	J	0.022 50V Mylar	AB
C404	VCCCCY1HH680J	J	68p 50V Ceramic	AA	C802	VCEA0A1HW474M	J	0.47 50V EL.	AB
C405	VCEA0A1HW335M	J	3.3 50V EL.	AB	C803	VCCCCY1HH120J	J	12p 50V Ceramic	AA
C406	VCEA0A1HW335M	J	3.3 50V EL.	AB	C804	VCEA0A1HW104M	J	0.1 50V EL.	AB
C407	VCQYTA1HM104K	J	0.1 50V Mylar	AC	C805	VCEA0A1HW104M	J	0.1 50V EL.	AB
C408	VCEA0A1CW106M	J	10 16V EL.	AB	C806	VCEA0A1HW104M	J	0.1 50V EL.	AB
C409	VCEA0A1HW105M	J	1.0 50V EL.	AB	C807	VCCCCY1HH820J	J	82p 50V Ceramic	AA
C410	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA	C901	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C411	VCEAGA1CW108M	J	1000 16V EL.	AD	C905	VCEA0A1HW335M	J	3.3 50V EL.	AB
C413	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	C2001	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C414	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA	C2002	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C419	VCCCCY1HH330J	J	33p 50V Ceramic	AA	C2021	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C420	VCCCCY1HH471J	J	470p 50V Ceramic	AA	C2022	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C451	VCQYTA1HM563K	J	0.056 50V Mylar	AB	C2023	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C454	VCEA0A1HW475M	J	4.7 50V EL.	AB	C2024	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C502	VCEA0A1EW477M	J	470 25V EL.	AD	C2040	VCEA0A1AW107M	J	100 10V EL.	AB
C504	VCKYPA2HB391K	J	390p 500V Ceramic	AA	C2041	VCEA0A1HW105M	J	1.0 50V EL.	AB
C505	VCQYTA1HM473K	J	0.047 50V Mylar	AB	C2051	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C507	VCKYPA1HB102K	J	1000p 50V Ceramic	AA	C2060	VCQYTA1HM104K	J	0.1 50V Mylar	AC
C508	VCEAGA1VW107M	J	100 35V EL.	AC	C2061	VCKYD41HB101K	J	100p 50V Ceramic	AA
C509	VCKYPA2HB102K	J	1000p 500V Ceramic	AA	C2062	VCEA0A1AW107M	J	100 10V EL.	AB
C510	VCEAGA1VW477M	J	470 35V EL.	AD	C2402	VCCCCY1HH560J	J	56p 50V Ceramic	AA
C511	VCQYTA1HM473K	J	0.047 50V Mylar	AB	C2601	VCEA0A1HW475M	J	4.7 50V EL.	AB
C513	VCEACA1HC225M	J	2.2 50V EL.	AC	C2602	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C514	VCEACA1HC335J	J	3.3 50V EL.	AC	RESISTORS				
C517	VCKYCY1HB102K	J	1000p 50V Ceramic	AA	<i>[M-Ox... Metal Oxide, M-Film ... Metal Film]</i>				
C522	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ1	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C551	VCSATA1CE225K	J	2.2 16V Tantalum.	AB	RJ3	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C552	VCEA0A1HW225M	J	2.2 50V EL.	AB	RJ5	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C604	VCEA0A1CW227M	J	220 16V EL.	AC	RJ6	VRN-MD2AL000J	J	0 1/10W M-Film	AA
△ C608	VCFPD3CA522H	J	5200p 1.6kV M-Poly.	AE	RJ7	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C609	VCQYTA1HM223K	J	0.022 50V Mylar	AB	RJ9	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C612	VCFPB2EB334J	J	0.33 250V M-Poly.	AF	RJ10	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C631	VCEA0A1HW225M	J	2.2 50V EL.	AB	RJ15	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C632	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA	RJ17	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C633	VCEA0A1HW105M	J	1.0 50V EL.	AB	RJ18	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C652	VCEA0A1HW475M	J	4.7 50V EL.	AB	RJ19	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C653	VCEA0A1CW106M	J	10 16V EL.	AB	RJ20	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C661	VCKYPA2HB152K	J	1500p 500V Ceramic	AA	RJ21	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C662	VCEA0A1CW477M	J	470 16V EL.	AC	RJ23	VRN-MD2AL000J	J	0 1/10W M-Film	AA
△ C701	RC-FZ015SCEZZ	J	0.047 AC125V Plastic	AE	RJ24	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	or				RJ26	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	RC-FZ002SCEZZ				RJ31	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	or				RJ32	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	RC-FZ004SGEZZ				RJ35	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	or				RJ39	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	RC-FZ027CUMZZ				RJ40	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	or				RJ46	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	RC-FZ027SCEZZ				RJ49	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	or				RJ52	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	RC-FZ019SCEZZ				RJ54	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	or				RJ55	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	RC-FZ059SCEZZ				RJ57	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	or				RJ59	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C702	VCKYPB2HE103P	J	0.01 500V Ceramic	AB	RJ62	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C703	VCKYPB2HE103P	J	0.01 500V Ceramic	AB	RJ63	VRN-MD2AL000J	J	0 1/10W M-Film	AA
C704	VCKYPB2HE103P	J	0.01 500V Ceramic	AB	RJ66	VRN-MD2AL000J	J	0 1/10W M-Film	AA
△ C705	RC-EZ0422CEZZ	J	470 200V EL.	AN	RJ67	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	or				RJ68	VRN-MD2AL000J	J	0 1/10W M-Film	AA
	RC-EZ0522CEZZ				RJ69	VRN-MD2AL000J	J	0 1/10W M-Film	AA
					RJ71	VRN-MD2AL000J	J	0 1/10W M-Film	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code		
PWB-A : DUNTK9529WEW1(13L-M100/150)					PWB-A : DUNTK9529WEW3(CL13M10/15)						
MAIN UNIT (Continued)											
RJ75	VRN-MD2AL000J	J 0	1/10W	M-Film	AA	△ R603	VRS-VV3LB270J	J 27	3W	M-Ox.	AB
RJ77	VRN-MD2AL000J	J 0	1/10W	M-Film	AA	R605	VRN-MD2AL332J	J 3.3k	1/10W	M-Film	AA
RJ78	VRN-MD2AL000J	J 0	1/10W	M-Film	AA	R606	VRD-RA2BE102J	J 1.0k	1/8W	Carbon	AA
RJ79	VRN-MD2AL000J	J 0	1/10W	M-Film	AA	R608	VRD-RA2BE101J	J 100	1/8W	Carbon	AB
△ R51	VRS-VV3AB331J	J 330	1W	M-Ox.	AA	R609	VRD-RA2BE331J	J 330	1/8W	Carbon	AA
△ R52	VRS-VV3DB470J	J 47	2W	M-Ox.	AA	△ R610	VRS-VV3DB391J	J 390	2W	M-Ox.	AA
△ R53	VRS-VV3LB223J	J 22k	3W	M-Ox.	AB	R620	VRD-RA2BE473J	J 47k	1/8W	Carbon	AA
R54	VRN-MD2AL101J	J 100	1/10W	M-Film	AA	R621	VRN-MD2AL682J	J 6.8k	1/10W	M-Film	AA
R55	VRN-MD2AL101J	J 100	1/10W	M-Film	AA	R631	VRN-MD2AL391J	J 390	1/10W	M-Film	AA
R56	VRN-MD2AL823J	J 82k	1/10W	M-Film	AA	R632	VRN-MD2AL152J	J 1.5k	1/10W	M-Film	AA
R57	VRN-MD2AL392J	J 3.9k	1/10W	M-Film	AA	R633	VRN-MD2AL472J	J 4.7k	1/10W	M-Film	AA
R201	VRN-MD2AL221J	J 220	1/10W	M-Film	AA	R634	VRD-RM2HD121J	J 120	1/2W	Carbon	AA
R202	VRN-MD2AL122J	J 1.2k	1/10W	M-Film	AA	△ R641	VRS-VV3AB682J	J 6.8k	1W	M-Ox.	AA
R203	VRD-RA2BE682J	J 6.8k	1/8W	Carbon	AA	R642	VRD-RA2BE821J	J 820	1/8W	Carbon	AA
R204	VRN-MD2AL270J	J 27	1/10W	M-Film	AA	▲▲ R651	VRD-RM2HD1R0J	J 1.0	1/2W	Carbon	AA
R205	VRD-RA2BE391J	J 390	1/8W	Carbon	AA	▲▲ R654	VRD-RA2BE154J	J 150k	1/8W	Carbon	AA
R206	VRD-RA2EE151J	J 150	1/4W	Carbon	AA	▲▲ R655	VRN-MD2AL104J	J 100k	1/10W	M-Film	AA
R208	VRN-MD2AL391J	J 390	1/10W	M-Film	AA	▲▲ R656	VRN-MD2AL333J	J 33k	1/10W	M-Film	AA
R301	VRD-RA2BE222J	J 2.2k	1/8W	Carbon	AA	△ R659	VRN-VV3AB1R8J	J 1.8	1W	M-Film	AA
R302	VRN-MD2AL102J	J 1.0k	1/10W	M-Film	AA	△ R661	VRN-VV3ABR47J	J 0.47	1W	M-Film	AA
R303	VRN-MD2AL153J	J 15k	1/10W	M-Film	AA	△ R701	RR-HZ0046CEZZ	J 2.7M	1/2W	Solid	AD
R307	VRN-MD2AL333J	J 33k	1/10W	M-Film	AA	or RR-DZ0047CEZZ or					
R352	VRN-MD2AL332J	J 3.3k	1/10W	M-Film	AA	VRC-UB2HG275K					
R353	VRN-MD2AL4R7J	J 4.7	1/10W	M-Film	AA	△ R702	VRW-KP3HC1R8K	J 1.8	5W	Cement	AC
R354	VRN-MD2AL152J	J 1.5k	1/10W	M-Film	AA	△ R703	VRS-KA3NG561J	J 560	7W	M-Ox.	AF
R361	VRD-RA2BE102J	J 1.0k	1/8W	Carbon	AA	R704	VRD-RM2HD123J	J 12k	1/2W	Carbon	AA
R364	VRN-MD2AL473J	J 47k	1/10W	M-Film	AA	R705	VRD-RA2EE334J	J 330k	1/4W	Carbon	AA
R401	VRN-MD2AL682J	J 6.8k	1/10W	M-Film	AA	R706	VRD-RM2HD470J	J 47	1/2W	Carbon	AA
R403	VRD-RA2BE331J	J 330	1/8W	Carbon	AA	△ R707	VRN-VV3DB1R5J	J 1.5	2W	M-Film	AB
R404	VRN-MD2AL391J	J 390	1/10W	M-Film	AA	△ R708	VRD-RM2HD824J	J 820k	1/2W	Carbon	AA
R407	VRN-MD2AL471J	J 470	1/10W	M-Film	AA	△ R709	VRS-KA3NG561J	J 560	7W	M-Ox.	AF
R409	VRN-MD2AL471J	J 470	1/10W	M-Film	AA	△ R717	VRS-KA3HG3R3K	J 3.3	5W	M-Ox.	AD
R410	VRD-RA2BE563J	J 56k	1/8W	Carbon	AA	△ R730	VRS-VV3DB270J	J 27	2W	M-Ox.	AA
R411	VRN-MD2AL103J	J 10k	1/10W	M-Film	AA	△ R750	VRS-VV3AB561J	J 560	1W	M-Ox.	AA
R412	VRD-RA2EE561J	J 560	1/4W	Carbon	AA	R752	VRD-RA2BE562J	J 5.6k	1/8W	Carbon	AA
R413	VRD-RA2BE470J	J 47	1/8W	Carbon	AA	R754	VRN-MD2AL471J	J 470	1/10W	M-Film	AA
R414	VRD-RA2BE470J	J 47	1/8W	Carbon	AA	△ R755	VRS-VV3DB470J	J 47	2W	M-Ox.	AA
R415	VRD-RA2BE470J	J 47	1/8W	Carbon	AA	R757	VRN-MD2AL472J	J 4.7k	1/10W	M-Film	AA
R416	VRN-MD2AL102J	J 1.0k	1/10W	M-Film	AA	△ R758	VRS-SV2HC150J	J 15	1/2W	M-Ox.	AA
R417	VRD-RA2BE101J	J 100	1/8W	Carbon	AB	R801	VRN-MD2AL332J	J 3.3k	1/10W	M-Film	AA
R418	VRN-MD2AL152J	J 1.5k	1/10W	M-Film	AA	R802	VRN-MD2AL332J	J 3.3k	1/10W	M-Film	AA
R419	VRN-MD2AL472J	J 4.7k	1/10W	M-Film	AA	R803	VRN-MD2AL182J	J 1.8k	1/10W	M-Film	AA
R423	VRN-MD2AL222J	J 2.2k	1/10W	M-Film	AA	R804	VRN-MD2AL182J	J 1.8k	1/10W	M-Film	AA
R426	VRN-MD2AL271J	J 270	1/10W	M-Film	AA	R805	VRN-MD2AL182J	J 1.8k	1/10W	M-Film	AA
R440	VRN-MD2AL821J	J 820	1/10W	M-Film	AA	R806	VRN-MD2AL333J	J 33k	1/10W	M-Film	AA
△ R451	VRS-SV2HC103J	J 10k	1/2W	M-Ox.	AA	R902	VRN-MD2AL750J	J 75	1/10W	M-Film	AA
R452	VRD-RA2BE152J	J 1.5k	1/8W	Carbon	AA	R906	VRN-MD2AL102J	J 1.0k	1/10W	M-Film	AA
R454	VRD-RA2BE334J	J 330k	1/8W	Carbon	AA	R925	VRN-MD2AL104J	J 100k	1/10W	M-Film	AA
R455	VRD-RA2BE392J	J 3.9k	1/8W	Carbon	AA	R961	VRN-MD2AL101J	J 100	1/10W	M-Film	AA
R456	VRN-MD2AL223J	J 22k	1/10W	M-Film	AA	R962	VRN-MD2AL101J	J 100	1/10W	M-Film	AA
R457	VRD-RA2BE102J	J 1.0k	1/8W	Carbon	AA	R2001	VRD-RA2BE102J	J 1.0k	1/8W	Carbon	AA
R458	VRD-RA2BE564J	J 560k	1/8W	Carbon	AA	R2002	VRN-MD2AL103J	J 10k	1/10W	M-Film	AA
R459	VRD-RA2BE123J	J 12k	1/8W	Carbon	AA	R2006	VRN-MD2AL103J	J 10k	1/10W	M-Film	AA
R504	VRD-RA2BE471J	J 470	1/8W	Carbon	AA	R2007	VRD-RA2BE223J	J 22k	1/8W	Carbon	AA
R505	VRN-MD2AL101J	J 100	1/10W	M-Film	AA	R2008	VRD-RA2BE224J	J 220k	1/8W	Carbon	AA
R506	VRD-RA2BE683G	J 68k	1/8W	Carbon	AA	R2009	VRN-MD2AL102J	J 1.0k	1/10W	M-Film	AA
R507	VRD-RA2BE104G	J 100k	1/8W	Carbon	AA	R2010	VRN-MD2AL102J	J 1.0k	1/10W	M-Film	AA
R508	VRD-RA2BE473J	J 47k	1/8W	Carbon	AA	R2011	VRN-MD2AL821J	J 820	1/10W	M-Film	AA
R510	VRD-RM2HD1R5J	J 1.5	1/2W	Carbon	AA	R2012	VRN-MD2AL471J	J 470	1/10W	M-Film	AA
△ R511	VRN-SV2HB3R9J	J 3.9	1/2W	M-Film	AB	R2020	VRD-RM2HD223J	J 22k	1/2W	Carbon	AA
R512	VRD-RM2HD681J	J 680	1/2W	Carbon	AA	R2022	VRD-RA2BE333J	J 33k	1/8W	Carbon	AA
R516	VRD-RA2BE223G	J 22k	1/8W	Carbon	AA	R2024	VRD-RA2BE682J	J 6.8k	1/8W	Carbon	AA
R517	VRD-RA2BE103G	J 10k	1/8W	Carbon	AA	R2025	VRD-RA2BE682J	J 6.8k	1/8W	Carbon	AA
R518	VRD-RA2BE154J	J 150k	1/8W	Carbon	AA	R2026	VRD-RA2BE682J	J 6.8k	1/8W	Carbon	AA
R524	VRN-MD2AL332J	J 3.3k	1/10W	M-Film	AA	R2027	VRD-RA2BE682J	J 6.8k	1/8W	Carbon	AA
R525	VRD-RA2BE473J	J 47k	1/8W	Carbon	AA	R2028	VRD-RA2BE102J	J 1.0k	1/8W	Carbon	AA
R552	VRD-RA2BE102J	J 1.0k	1/8W	Carbon	AA	R2029	VRN-MD2AL102J	J 1.0k	1/10W	M-Film	AA
R553	VRN-MD2AL273J	J 27k	1/10W	M-Film	AA	R2032	VRN-MD2AL471J	J 470	1/10W	M-Film	AA
R554	VRN-MD2AL472J	J 4.7k	1/10W	M-Film	AA	R2033	VRD-RA2BE103J	J 10k	1/8W	Carbon	AA
R555	VRN-MD2AL102J	J 1.0k	1/10W	M-Film	AA	R2040	VRN-MD2AL102J	J 1.0k	1/10W	M-Film	AA
R556	VRN-MD2AL102J	J 1.0k	1/10W	M-Film	AA	R2041	VRN-MD2AL333J	J 33k	1/10W	M-Film	AA
R602	VRD-RA2EE820J	J 82	1/4W	Carbon	AA	R2042	VRN-MD2AL101J	J 100	1/10W	M-Film	AA
						R2043	VRN-MD2AL101J	J 100	1/10W	M-Film	AA
						R2044	VRN-MD2AL683J	J 68k	1/10W	M-Film	AA

Ref. No. Part No. ★ Description Code
PWB-A : DUNTK9529WEW1(13L-M100/150)
PWB-A : DUNTK9529WEW3(CL13M10/15)
MAIN UNIT (Continued)

R2045	VRN-MD2AL101J	J	100	1/10W	M-Film	AA
R2047	VRN-MD2AL221J	J	220	1/10W	M-Film	AA
R2048	VRD-RA2BE562J	J	5.6k	1/8W	Carbon	AA
R2049	VRN-MD2AL333J	J	33k	1/10W	M-Film	AA
R2054	VRN-MD2AL222J	J	2.2k	1/10W	M-Film	AA
R2055	VRN-MD2AL103J	J	10k	1/10W	M-Film	AA
R2060	VRN-MD2AL221J	J	220	1/10W	M-Film	AA
R2061	VRN-MD2AL562J	J	5.6k	1/10W	M-Film	AA
R2062	VRN-MD2AL183J	J	18k	1/10W	M-Film	AA
R2063	VRD-RA2BE222J	J	2.2k	1/8W	Carbon	AA
R2064	VRD-RA2BE332J	J	3.3k	1/8W	Carbon	AA
R2066	VRN-MD2AL103J	J	10k	1/10W	M-Film	AA
R2067	VRN-MD2AL103J	J	10k	1/10W	M-Film	AA
R2068	VRN-MD2AL103J	J	10k	1/10W	M-Film	AA
R2070	VRN-MD2AL103J	J	10k	1/10W	M-Film	AA
R2101	VRN-MD2AL101J	J	100	1/10W	M-Film	AA
R2102	VRN-MD2AL101J	J	100	1/10W	M-Film	AA
R2401	VRN-MD2AL101J	J	100	1/10W	M-Film	AA
R2402	VRN-MD2AL101J	J	100	1/10W	M-Film	AA
R2403	VRN-MD2AL101J	J	100	1/10W	M-Film	AA
R2404	VRN-MD2AL101J	J	100	1/10W	M-Film	AA
R2501	VRN-MD2AL123J	J	12k	1/10W	M-Film	AA
R2503	VRN-MD2AL273J	J	27k	1/10W	M-Film	AA
R2504	VRN-MD2AL123J	J	12k	1/10W	M-Film	AA
R2505	VRN-MD2AL563J	J	56k	1/10W	M-Film	AA
R2506	VRN-MD2AL563J	J	56k	1/10W	M-Film	AA
R2507	VRN-MD2AL823J	J	82k	1/10W	M-Film	AA
R2508	VRN-MD2AL153J	J	15k	1/10W	M-Film	AA
R2509	VRN-MD2AL272J	J	2.7k	1/10W	M-Film	AA
R2601	VRD-RA2BE331J	J	330	1/8W	Carbon	AA

SWITCHES

S2501	QSW-K0079GEZZ	J	Power			AB
S2502	QSW-K0079GEZZ	J	Vol-down			AB
S2503	QSW-K0079GEZZ	J	Vol-up			AB
S2504	QSW-K0079GEZZ	J	CH-down			AB
S2505	QSW-K0079GEZZ	J	CH-up			AB

MISCELLANEOUS PARTS

△ RY701	RRLYU0036CEZZ	J	Relay			AM
	or					
	RRLYU0038CEZZ					
	or					
	RRLYU0077CEZZ					
△ F701	QFS-B4023CEZZ	J	Fuse, 4A(125V)			AC
	or					
	QFS-B4021GEZZ					
FB602	RBLN-0037CEZZ	J	Ferrite Bead			AB
FB603	RBLN-0037CEZZ	J	Ferrite Bead			AB
FH701	QFSDH1013CEZZ	J	Fuse Holder			AC
FH702	QFSDH1014CEZZ	J	Fuse Holder			AC
J903	QJAKE0159CEZZ	J	Jack, Audio IN			AF
J905	QJAKE0158CEZZ	J	Jack, Video IN			AF
P302	QPLGN0261CEZZ	J	Plug, 2-pin(S)			AB
P401	QPLGN0561CEZZ	J	Plug, 5-pin(GBN)			AB
P601	QPLGN0603CEZZ	J	Plug, 6-pin(K)			AB
P651	QPLGN0361CEZZ	J	Plug, 3-pin			AB
P701	QPLGN0207CEZZ	J	Plug, 2-pin(M)			AA
P751	QPLGN0461CEZZ	J	Plug, 4-pin(YBN)			AB
P2001	QPLGN0561CEZZ	J	Plug, 5-pin			AB
RMC2601	RRMCU0227CEZZ	J	R/C Receiver			AK
	or					
	RRMCU0222CEZZ					
RDA501	PRDAR0218PEFW	R	Heat Sink, IC501			AD
RDA701	PRDAR0237PEFW	R	Heat Sink, IC701			AK
TP701	QLUGP0102PEZZ	R	Lug			AA
	PZETM0016CEZZ	J	Insulator			AB
	LX-BZ3049GEFD	J	Screw			AA
	LX-BZ3100CEFD	J	Screw			AA
	LX-TZ3004CEFD	J	Screw			AA

Ref. No. Part No. ★ Description Code
PWB-A : DUNTK9529WEW5(14ML10)
MAIN UNIT

TUNER

NOTE : THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

△ TU51	VTU115B8025AM	M	Tuner			BA
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INTEGRATED CIRCUITS

IC101	VHiKA78S05P-1	J	KA78S05P			AD
	or					
	VHiTA7805S/-1					
△△ IC201	RH-iX3253CEZZ	J	TA1268AN			AV
	IC351	VHiTDA7233/-1	J	TDA7233		AF
△ IC501	VHiTA8403K/-1	J	TA8403K			AL
△△ IC701	VHiSTR301301E	J	STR30130			AP
△ IC751	VHiKA7809Pi-1	J	KA7809PI			AE
	or					
	VHiTA7809S/-1					
△ IC761	VHiKA7812Pi-1	J	KA7812PI			AE
	or					
	VHiTA7812S/-1					
IC2001	RH-iX3256CEZZ	J	TMPA8701CMF142			AX
IC2040	VHiPST994C/-1	J	PST994C			AD
IC2101	VHiM24C01B/-1	J	M24C01-BN6			AF

TRANSISTORS

You can substitute "VS2SC2462-C-1" for "VS2SD601AR/-1".

Q201	VS2SC2735//1E	J	2SC2735			AC
Q351	VS2SD601AR/-1	J	2SD601AR			AC
Q401	VS2SD601AR/-1	J	2SD601AR			AC
Q403	VS2SD601AR/-1	J	2SD601AR			AC
Q404	VS2SB709AR/-1	J	2SB709AR			AC
Q451	VS2SB709AR/-1	J	2SB709AR			AC
Q501	VS2SD601AR/-1	J	2SD601AR			AC
Q601	VS2SC2655Y/-1	J	2SC2655Y			AE
△△ Q602	VS2SD2586//1E	J	2SD2586			AM
	or					
	VS2SD2095//1E					
Q603	VS2SC945AQ/-1	J	2SC945A(Q)			AB
	or					
	VS2SC1815YW-1					
	or					
	VS2SC3198-Y-1					
Q752	VS2SC945AQ/-1	J	2SC945A(Q)			AB
	or					
	VS2SC1815YW-1					
	or					
	VS2SC3198-Y-1					
Q753	VS2SA1013//1E	J	2SA1013			AD
Q2001	VS2SD601AR/-1	J	2SD601AR			AC
Q2002	VS2SD601AR/-1	J	2SD601AR			AC
Q2060	VS2SD601AR/-1	J	2SD601AR			AC

DIODES

D51	RH-EX0611GEZZ	J	Zener Diode, 5.1V			AA
D52	RH-EX0676GEZZ	J	Zener Diode, 32V			AA
D401	VHD1SS119//1	J	Diode			AB
D402	RH-EX0092CEZZ	J	Zener Diode, 3.9V			AB
D454	RH-EX0103CEZZ	J	Zener Diode, 5.6V			AB
D455	VHD1SS119//1	J	Diode			AB
D501	RH-DX00441CEZZ	J	Diode			AC
	or					
	RH-DX0110CEZZ					
△ D502	RH-DX0131CEZZ	J	Diode			AC
D601	RH-DX0441CEZZ	J	Diode			AC
	or					
	RH-DX0110CEZZ					
D603	RH-DX0441CEZZ	J	Diode			AC
	or					
	RH-DX0110CEZZ					
D610	RH-DX0131CEZZ	J	Diode			AC
D631	RH-EX0630GEZZ	J	Zener Diode, 9.1V			AA

Ref. No.	Part No.	★	Description	Code
PWB-A : DUNTK9529WEW5(14ML10)				
MAIN UNIT (Continued)				
D641	RH-EX0630GEZZ	J	Zener Diode, 9.1V	AA
▲▲ D651	RH-DX0131CEZZ	J	Diode	AC
▲▲ D652	VHD1SS119//1	J	Diode	AB
▲▲ D653	RH-EX0091CEZZ	J	Zener Diode, 22V	AB
▲ D661	RH-DX0444CEZZ	J	Diode	AH
▲ D701	RH-DX0154CEZZ	J	Diode	AC
▲ D702	RH-DX0154CEZZ	J	Diode	AC
▲ D703	RH-DX0154CEZZ	J	Diode	AC
▲ D704	RH-DX0154CEZZ	J	Diode	AC
D753	VHD1SS119//1	J	Diode	AB
D754	VHD1SS119//1	J	Diode	AB
D755	RH-DX0441CEZZ	J	Diode	AC
	or			
▲ D756	RH-DX0110CEZZ	J	Diode	AC
	or			
D757	VHD1SS119//1	J	Diode	AB
▲ D758	RH-DX0131CEZZ	J	Diode	AC
	or			
▲ D760	RH-DX0441CEZZ	J	Diode	AC
▲ D761	RH-DX0441CEZZ	J	Diode	AC
	or			
▲ D762	RH-DX0110CEZZ	J	Diode	AC
	or			
D763	VHD1SS119//1	J	Diode	AB
D901	RH-EX0630GEZZ	J	Zener Diode, 9.1V	AA
D902	RH-EX0630GEZZ	J	Zener Diode, 9.1V	AA
D2001	VHD1SS119//1	J	Diode	AB
PACKAGED CIRCUITS				
▲ PR701	RMPTP0026CEZZ	J	Packaged Circuit	AF
X801	RCRSB0205CEZZ	J	Crystal	AF
	or			
	RCRSB0001PEZZ			
FILTERS				
CF301	RFiLC0403CEZZ	J	Ceramic Filter	AE
CF401	RFiLC0013CEZZ	J	Ceramic Filter	AE
CF631	RFiLA0034CEZZ	J	Ceramic Filter	AD
CF2040	RFiLC0121GEZZ	J	Ceramic Filter	AD
SF201	RFiLC0405CEZZ	J	SAW Filter	AH
COILS				
L201	VP-XF1R2K0000	J	Peaking 1.2μH	AB
L202	RCiLi0612CEZZ	J	IF Coil	AE
	or			
	RCiLi0588CEZZ			
L301	VP-XF8R2K0000	J	Peaking 8.2μH	AB
L302	RCiLi0613CEZZ	J	VCO Coil	AE
L401	VP-XF120K0000	J	Peaking 12μH	AB
L402	VP-XF100K0000	J	Peaking 10μH	AB
L406	VP-XF680K0000	J	Peaking 68μH	AB
L408	VP-XF100K0000	J	Peaking 10μH	AB
▲ L701	RCiLF0029PEZZ	R	Coil	AH
	or			
	RCiLF0087CEZZ			
	or			
	RCiLF0235CEZZ			
L2040	RCiLB0159CEZZ	J	Oscillation Coil	AE
TRANSFORMERS				
▲ T601	RTRNZ0168CEZZ	J	Transformer	AH
▲▲ T602	RTRNF0148PEZZ	R	H-Volt Transformer	BD
	or			
	RTRNF0151PEZZ			

Ref. No.	Part No.	★	Description	Code
▲ T701	RTRNP0527CEZZ	J	Power Transformer	AM
	or			
	RTRNP0518CEZZ			
CAPACITORS				
<i>[EL... Electrolytic, M-Poly... Metalized Polypro Film]</i>				
C51	VCEA0A1CW476M	J	47 16V EL.	AB
C52	VCSATA1CE226K	J	22 16V Tantalum	AD
C53	VCEA0A1HW105M	J	1.0 50V EL.	AB
C54	VCEA0A1HW225M	J	2.2 50V EL.	AB
C55	VCEAGA1CW108M	J	1000 16V EL.	AD
C201	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C202	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C203	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C204	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C205	VCEA0A1HW474M	J	0.47 50V EL.	AB
C206	VCEA0A1CW227M	J	220 16V EL.	AC
C207	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C208	VCEA0A1HW474M	J	0.47 50V EL.	AB
C209	VCKYCY1HB222K	J	2200p 50V Ceramic	AA
C210	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C302	VCCCCY1HH330J	J	33p 50V Ceramic	AA
C303	VCKYCY1HB472K	J	4700p 50V Ceramic	AA
C304	VCEA0A1HW225M	J	2.2 50V EL.	AB
C305	VCKYPA1HB151K	J	150p 50V Ceramic	AA
C306	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C308	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C309	VCEA0A1CW227M	J	220 16V EL.	AC
C312	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C314	VCEA0A1HW225M	J	2.2 50V EL.	AB
C351	VCKYCY1HB562K	J	5600p 50V Ceramic	AA
C352	VCEA0A1CW107M	J	100 16V EL.	AC
C353	VCEA0A1CW337M	J	330 16V EL.	AC
C354	RC-QZA104TAYK	J	0.1 50V Mylar	AB
C355	VCEA0A1CW226M	J	22 16V EL.	AB
C361	VCEA0A1CW477M	J	470 16V EL.	AC
C362	VCEA0A1CW476M	J	47 16V EL.	AB
C403	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C404	VCCCCY1HH680J	J	68p 50V Ceramic	AA
C405	VCEA0A1HW335M	J	3.3 50V EL.	AB
C406	VCEA0A1HW335M	J	3.3 50V EL.	AB
C407	RC-QZA104TAYK	J	0.1 50V Mylar	AB
C408	VCEA0A1CW106M	J	10 16V EL.	AB
C409	VCEA0A1HW105M	J	1.0 50V EL.	AB
C410	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C411	VCEAGA1CW108M	J	1000 16V EL.	AD
C413	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C414	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C419	VCCCCY1HH330J	J	33p 50V Ceramic	AA
C420	VCCCCY1HH471J	J	470p 50V Ceramic	AA
C451	RC-QZA563TAYK	J	0.056 50V Mylar	AB
C454	VCEA0A1HW475M	J	4.7 50V EL.	AB
C502	VCEA0A1EW477M	J	470 25V EL.	AD
C504	VCKYPA2HB391K	J	390p 500V Ceramic	AA
C505	VCQYTA1HM473K	J	0.047 50V Mylar	AB
C507	VCKYPA1HB102K	J	1000p 50V Ceramic	AA
C508	VCEAGA1VW107M	J	100 35V EL.	AC
C509	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
C510	VCEAGA1VW477M	J	470 35V EL.	AD
C511	VCQYTA1HM473K	J	0.047 50V Mylar	AB
C513	VCEACA1HC225M	J	2.2 50V EL.	AC
C514	VCEACA1HC335J	J	3.3 50V EL.	AC
C517	VCKYCY1HB102K	J	1000p 50V Ceramic	AA
C551	VCSATA1CE225K	J	2.2 16V Tantalum	AB
C552	VCEA0A1HW225M	J	2.2 50V EL.	AB
C604	VCEA0A1CW227M	J	220 16V EL.	AC
▲▲ C608	VCFPD3CA522H	J	5200p 1.6kV M-Poly.	AE
C609	RC-QZA223TAYK	J	0.022 50V Mylar	AB
C612	VCFPD2EB334J	J	0.33 250V M-Poly.	AF
C631	VCEA0A1HW225M	J	2.2 50V EL.	AB
C632	VCKYCY1HF103Z	J	0.01 50V Ceramic	AA
C633	VCEA0A1HW105M	J	1.0 50V EL.	AB
C652	VCEA0A1HW475M	J	4.7 50V EL.	AB
C653	VCEA0A1CW106M	J	10 16V EL.	AB
C661	VCKYPA2HB152K	J	1500p 500V Ceramic	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A : DUNTK9529WEW5(14ML10)									
MAIN UNIT (Continued)									
C662	VCEA0A1CW477M	J	470 16V EL.	AC	RJ20	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
△ C701	RC-FZ027SCEZZ	J	0.047 AC125V Plastic		RJ21	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	or				RJ23	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	RC-FZ002SCEZZ				RJ24	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	or				RJ26	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	RC-FZ004SGEZZ				RJ31	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	or				RJ32	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	RC-FZ027CUMZZ				RJ35	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	or				RJ39	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	RC-FZ019SCEZZ				RJ40	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	or				RJ46	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	RC-FZ059SCEZZ				RJ49	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C702	VCKYPB2HE103P	J	0.01 500V Ceramic	AB	RJ52	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C703	VCKYPB2HE103P	J	0.01 500V Ceramic	AB	RJ54	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C704	VCKYPB2HE103P	J	0.01 500V Ceramic	AB	RJ55	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
△ C705	RC-EZ0422CEZZ	J	470 200V EL.		RJ57	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	or				RJ59	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
△ C706	RC-KZ0092GEZZ	J	0.0033 AC125V Ceramic	AC	RJ62	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	or				RJ63	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	RC-KZ0311CEZZ				RJ66	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C707	VCEAGA2CW226M	J	22 160V EL.	AD	RJ67	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
△ C712	RC-EZ0638CEZZ	J	33 160V EL.	AG	RJ68	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	or				RJ69	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
	RC-EZ0658CEZZ				RJ71	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C751	VCEA0A1VW477M	J	470 35V EL.	AB	RJ75	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C754	VCEA0A1CW337M	J	330 16V EL.	AC	RJ77	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C755	VCEA0A1CW107M	J	100 16V EL.	AC	RJ78	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C756	VCEAGA1CW108M	J	1000 16V EL.	AD	RJ79	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA
C757	RC-QZA104TAYK	J	0.1 50V Mylar	AB	△ R51	VRS-VV3DB151J	J	150 2W M-Ox.	AA
△ C758	VCEAGA2EW106M	J	10 250V EL.	AC	△ R52	VRN-VV3DB1R0J	J	1.0 2W M-Film	AB
C759	VCKYPA2HB102K	J	1000p 500V Ceramic	AA	△ R53	VRS-VV3LB223J	J	22k 3.0W M-Ox.	AB
C760	VCEAGA1CW108M	J	1000 16V EL.	AD	R54	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
C801	RC-QZA223TAYK	J	0.022 50V Mylar	AB	R55	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
C802	VCEA0A1HW474M	J	0.47 50V EL.	AB	R56	VRS-CY1JF823J	J	82k 1/16W M-Ox.	AA
C803	VCCCCY1HH120J	J	12p 50V Ceramic	AA	R57	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
C804	VCEA0A1HW104M	J	0.1 50V EL.	AB	R201	VRS-CY1JF221J	J	220 1/16W M-Ox.	AA
C805	VCEA0A1HW104M	J	0.1 50V EL.	AB	R202	VRS-CY1JF122J	J	1.2k 1/16W M-Ox.	AA
C806	VCEA0A1HW104M	J	0.1 50V EL.	AB	R203	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
C807	VCCCCY1HH820J	J	82p 50V Ceramic	AA	R204	VRS-CY1JF270J	J	27 1/16W M-Ox.	AA
C901	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA	R205	VRD-RA2BE391J	J	390 1/8W Carbon	AA
C905	VCEA0A1HW335M	J	3.3 50V EL.	AB	R206	VRD-RA2EE151J	J	150 1/4W Carbon	AA
C2001	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R208	VRS-CY1JF391J	J	390 1/16W M-Ox.	AA
C2002	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R301	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
C2021	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R302	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
C2022	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R303	VRS-CY1JF153J	J	15k 1/16W M-Ox.	AA
C2023	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R307	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
C2024	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R352	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
C2040	VCEA0A1AW107M	J	100 10V EL.	AB	R353	VRS-CY1JF4R7J	J	4.7 1/16W M-Ox.	AA
C2041	VCEA0A1HW105M	J	1.0 50V EL.	AB	R354	VRS-CY1JF152J	J	1.5k 1/16W M-Ox.	AA
C2051	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R361	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
C2060	RC-QZA104TAYK	J	0.1 50V Mylar	AB	R364	VRS-CY1JF473J	J	47k 1/16W M-Ox.	AA
C2061	VCKYD41HB101K	J	100p 50V Ceramic	AA	R401	VRS-CY1JF682J	J	6.8k 1/16W M-Ox.	AA
C2062	VCEA0A1AW107M	J	100 10V EL.	AB	R403	VRD-RA2BE331J	J	330 1/8W Carbon	AA
C2402	VCCCCY1HH560J	J	56p 50V Ceramic	AA	R404	VRS-CY1JF391J	J	390 1/16W M-Ox.	AA
C2601	VCEA0A1HW475M	J	4.7 50V EL.	AB	R407	VRS-CY1JF471J	J	470 1/16W M-Ox.	AA
C2602	VCCCCY1HH101J	J	100p 50V Ceramic	AA	R409	VRS-CY1JF471J	J	470 1/16W M-Ox.	AA
					R410	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
					R411	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
					R412	VRD-RA2EE561J	J	560 1/4W Carbon	AA
					R413	VRD-RA2BE470J	J	47 1/8W Carbon	AA
					R414	VRD-RA2BE470J	J	47 1/8W Carbon	AA
					R415	VRD-RA2BE470J	J	47 1/8W Carbon	AA
					R416	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
					R417	VRD-RA2BE101J	J	100 1/8W Carbon	AB
					R418	VRS-CY1JF152J	J	1.5k 1/16W M-Ox.	AA
					R419	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
					R423	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA
					R426	VRS-CY1JF271J	J	270 1/16W M-Ox.	AA
					R440	VRS-CY1JF821J	J	820 1/16W M-Ox.	AA
					△ R451	VRS-SV2HC103J	J	10k 1/2W M-Ox.	AA
					R452	VRD-RA2BE152J	J	1.5k 1/8W Carbon	AA
					R454	VRD-RA2BE334J	J	330k 1/8W Carbon	AA
					R455	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
					R456	VRS-CY1JF223J	J	22k 1/16W M-Ox.	AA
					R457	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
					R458	VRD-RA2BE564J	J	560k 1/8W Carbon	AA
RESISTORS									
<i>[M-Ox... Metal Oxide, M-Film ... Metal Film]</i>									
RJ1	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					
RJ3	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					
RJ5	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					
RJ6	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					
RJ7	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					
RJ9	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					
RJ10	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					
RJ15	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					
RJ17	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					
RJ18	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					
RJ19	VRS-CY1JF000J	J	0 1/16W M-Ox.	AA					

Ref. No.	Part No.	★	Description	Code
PWB-A : DUNTK9529WEW5(14ML10)				
MAIN UNIT (Continued)				
R459	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R504	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R505	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R506	VRD-RA2BE683G	J	68k 1/8W Carbon	AA
R507	VRD-RA2BE104G	J	100k 1/8W Carbon	AA
R508	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R510	VRD-RM2HD1R5J	J	1.5 1/2W Carbon	AA
△ R511	VRN-SV2HB3R9J	J	3.9 1/2W M-Film	AB
R512	VRD-RM2HD681J	J	680 1/2W Carbon	AA
R516	VRD-RA2BE223G	J	22k 1/8W Carbon	AA
R517	VRD-RA2BE103G	J	10k 1/8W Carbon	AA
R518	VRD-RA2BE154J	J	150k 1/8W Carbon	AA
R524	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R525	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R552	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R553	VRS-CY1JF273J	J	27k 1/16W M-Ox.	AA
R554	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
R555	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R556	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R602	VRD-RA2EE820J	J	82 1/4W Carbon	AA
△ R603	VRS-VV3LB270J	J	27 3.0W M-Ox.	AB
R605	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R606	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R608	VRD-RA2BE101J	J	100 1/8W Carbon	AB
R609	VRD-RA2BE331J	J	330 1/8W Carbon	AA
△ R610	VRS-VV3DB391J	J	390 2W M-Ox.	AA
R620	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R621	VRS-CY1JF682J	J	6.8k 1/16W M-Ox.	AA
R631	VRS-CY1JF391J	J	390 1/16W M-Ox.	AA
R632	VRS-CY1JF152J	J	1.5k 1/16W M-Ox.	AA
R633	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
R634	VRD-RM2HD121J	J	120 1/2W Carbon	AA
△ R641	VRS-VV3AB682J	J	6.8k 1W M-Ox.	AA
R642	VRD-RA2BE821J	J	820 1/8W Carbon	AA
▲▲ R651	VRD-RM2HD1R0J	J	1.0 1/2W Carbon	AA
▲▲ R654	VRD-RA2BE154J	J	150k 1/8W Carbon	AA
▲▲ R655	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
▲▲ R656	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
△ R659	VRN-VV3AB1R8J	J	1.8 1W M-Film	AA
△ R661	VRN-VV3ABR47J	J	0.47 1W Metal Film	AA
△ R701	RR-HZ0046CEZZ	J	2.7M 1/2W Solid	AD
	or			
	RR-DZ0047CEZZ			
	or			
	VRC-UB2HG275K			
△ R702	VRW-KP3HC1R8K	J	1.8 5W Cement	AC
△ R703	VRS-KA3NG561J	J	560 7.0W M-Ox.	AF
R704	VRD-RM2HD123J	J	12k 1/2W Carbon	AA
R705	VRD-RA2EE334J	J	330k 1/4W Carbon	AA
R706	VRD-RM2HD470J	J	47 1/2W Carbon	AA
△ R707	VRN-VV3DB1R5J	J	1.5 2W Metal Film	AB
△ R708	VRD-RM2HD824J	J	820k 1/2W Carbon	AA
△ R709	VRS-KA3NG561J	J	560 7.0W M-Ox.	AF
△ R717	VRS-KA3HG3R3K	J	3.3 5W M-Ox.	AD
△ R730	VRS-VV3DB270J	J	27 2W M-Ox.	AA
△ R750	VRS-VV3AB561J	J	560 1W M-Ox.	AA
R752	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R754	VRS-CY1JF471J	J	470 1/16W M-Ox.	AA
△ R755	VRS-VV3DB470J	J	47 2W M-Ox.	AA
R757	VRS-CY1JF472J	J	4.7k 1/16W M-Ox.	AA
△ R758	VRS-SV2HC150J	J	15 1/2W M-Ox.	AA
R801	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R802	VRS-CY1JF332J	J	3.3k 1/16W M-Ox.	AA
R803	VRS-CY1JF182J	J	1.8k 1/16W M-Ox.	AA
R804	VRS-CY1JF182J	J	1.8k 1/16W M-Ox.	AA
R805	VRS-CY1JF182J	J	1.8k 1/16W M-Ox.	AA
R806	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
R902	VRS-CY1JF750J	J	75 1/16W M-Ox.	AA
R906	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R925	VRS-CY1JF104J	J	100k 1/16W M-Ox.	AA
R961	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R962	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA

Ref. No.	Part No.	★	Description	Code
R2001	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R2002	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2006	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2007	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R2008	VRD-RA2BE224J	J	220k 1/8W Carbon	AA
R2009	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R2010	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R2011	VRS-CY1JF821J	J	820 1/16W M-Ox.	AA
R2012	VRS-CY1JF471J	J	470 1/16W M-Ox.	AA
R2020	VRD-RM2HD223J	J	22k 1/2W Carbon	AA
R2022	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R2024	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2025	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2026	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2027	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R2028	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R2029	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R2032	VRS-CY1JF471J	J	470 1/16W M-Ox.	AA
R2033	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R2040	VRS-CY1JF102J	J	1.0k 1/16W M-Ox.	AA
R2041	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
R2042	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2043	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2044	VRS-CY1JF683J	J	68k 1/16W M-Ox.	AA
R2045	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2047	VRS-CY1JF221J	J	220 1/16W M-Ox.	AA
R2048	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R2049	VRS-CY1JF333J	J	33k 1/16W M-Ox.	AA
R2054	VRS-CY1JF222J	J	2.2k 1/16W M-Ox.	AA
R2055	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2060	VRS-CY1JF221J	J	220 1/16W M-Ox.	AA
R2061	VRS-CY1JF562J	J	5.6k 1/16W M-Ox.	AA
R2062	VRS-CY1JF183J	J	18k 1/16W M-Ox.	AA
R2063	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R2064	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R2066	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2067	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2068	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2070	VRS-CY1JF103J	J	10k 1/16W M-Ox.	AA
R2101	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2102	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2401	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2402	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2403	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2404	VRS-CY1JF101J	J	100 1/16W M-Ox.	AA
R2501	VRS-CY1JF123J	J	12k 1/16W M-Ox.	AA
R2503	VRS-CY1JF273J	J	27k 1/16W M-Ox.	AA
R2504	VRS-CY1JF123J	J	12k 1/16W M-Ox.	AA
R2505	VRS-CY1JF563J	J	56k 1/16W M-Ox.	AA
R2506	VRS-CY1JF563J	J	56k 1/16W M-Ox.	AA
R2507	VRS-CY1JF823J	J	82k 1/16W M-Ox.	AA
R2508	VRS-CY1JF153J	J	15k 1/16W M-Ox.	AA
R2509	VRS-CY1JF272J	J	2.7k 1/16W M-Ox.	AA
R2601	VRD-RA2BE331J	J	330 1/8W Carbon	AA

SWITCHES

S2501	QSW-K0079GEZZ	J	Power	AB
S2502	QSW-K0079GEZZ	J	Vol-down	AB
S2503	QSW-K0079GEZZ	J	Vol-up	AB
S2504	QSW-K0079GEZZ	J	CH-down	AB
S2505	QSW-K0079GEZZ	J	CH-up	AB

MISCELLANEOUS PARTS

△ RY701	RRLYU0036CEZZ	J	Relay	AM
	or			
	RRLYU0038CEZZ			
	or			
	RRLYU0077CEZZ			
△ F701	QFS-B4023CEZZ	J	Fuse, 4A(125V)	AC
	or			
	QFS-B4021GEZZ			
FB602	RBLN-0037CEZZ	J	Ferrite Bead	AB
FB603	RBLN-0037CEZZ	J	Ferrite Bead	AB
FH701	QFSDH1013CEZZ	J	Fuse Holder	AC
FH702	QFSDH1014CEZZ	J	Fuse Holder	AC

Ref. No.	Part No.	★	Description	Code
PWB-A : DUNTK9529WEW5(14ML10)				
MAIN UNIT (Continued)				
J903	QJAKE0159CEZZ	J	Jack, Audio IN	AF
J905	QJAKE0158CEZZ	J	Jack, Video IN	AF
P302	QPLGN0261CEZZ	J	Plug, 2-pin(S)	AB
P401	QPLGN0561CEZZ	J	Plug, 5-pin(GBN)	AB
P601	QPLGN0603CEZZ	J	Plug, 6-pin(K)	AB
P651	QPLGN0361CEZZ	J	Plug, 3-pin	AB
P701	QPLGN0207CEZZ	J	Plug, 2-pin(M)	AA
P751	QPLGN0461CEZZ	J	Plug, 4-pin(YBN)	AB
P2001	QPLGN0561CEZZ	J	Plug, 5-pin	AB
RMC2601	RRMCU0227CEZZ	J	R/C Receiver	AK
	or			
	RRMCU0222CEZZ			
HM601	LX-GZ3002PEZZ	R	Screw	AB
HM602	LX-GZ3002PEZZ	R	Screw	AB
HM705	LX-GZ3001PEZZ	R	Screw	AB
HM706	LX-GZ3001PEZZ	R	Screw	AB
HM707	LX-GZ3001PEZZ	R	Screw	AB
HM708	LX-GZ3001PEZZ	R	Screw	AB
HM711	LX-GZ3001PEZZ	R	Screw	AB
HM712	LX-GZ3001PEZZ	R	Screw	AB
HM713	LX-GZ3001PEZZ	R	Screw	AB
HM714	LX-GZ3001PEZZ	R	Screw	AB
HM715	LX-GZ3001PEZZ	R	Screw	AB
HM716	LX-GZ3001PEZZ	R	Screw	AB
HM717	LX-GZ3001PEZZ	R	Screw	AB
HM718	LX-GZ3001PEZZ	R	Screw	AB
HM719	LX-GZ3001PEZZ	R	Screw	AB
HM720	LX-GZ3001PEZZ	R	Screw	AB
HM722	LX-GZ3002PEZZ	R	Screw	AB
HM724	LX-GZ3002PEZZ	R	Screw	AB
HM726	LX-GZ3002PEZZ	R	Screw	AB
HM729	LX-GZ3001PEZZ	R	Screw	AB
HM730	LX-GZ3001PEZZ	R	Screw	AB
HM734	LX-GZ3002PEZZ	R	Screw	AB
HM735	LX-GZ3002PEZZ	R	Screw	AB
HM739	LX-GZ3002PEZZ	R	Screw	AB
HM740	LX-GZ3002PEZZ	R	Screw	AB
HM741	LX-GZ3002PEZZ	R	Screw	AB
HM743	LX-GZ3002PEZZ	R	Screw	AB
RDA501	PRDAR0103GJFW	X	Heat Sink, IC501	
RDA701	PRDAR0237PEFW	R	Heat Sink, IC701	AK
TP701	QLUGP0102PEZZ	R	Lug	AA
	PZETM0016CEZZ	J	Insulator	AB
	LX-BZ3049GEFD	J	Screw	AA
	LX-BZ3100CEFD	J	Screw	AA
	LX-TZ3004CEFD	J	Screw	AA

Ref. No.	Part No.	★	Description	Code
PWB-B : DUNTK9530WEW1				
(13L-M100/150, CL13M10/15)				
CRT UNIT				
TRANSISTORS				
Q852	VS2SC2229O/1E	J	2SC2229(O)	AD
Q854	VS2SC2229O/1E	J	2SC2229(O)	AD
Q856	VS2SC2229O/1E	J	2SC2229(O)	AD
Q881	VS2SA1266-Y-1	J	2SA1266(Y)	AA
	or			
	VS2SA1015-Y-1			
DIODES				
D881	VHD1SS119//-1	J	Diode	AB
D882	VHD1SS119//-1	J	Diode	AB
D885	VHD1SS119//-1	J	Diode	AB
COIL				
L851	VP-DF151K0000	J	Peaking 150µH	AB
CAPACITORS				
<i>[EL... Electrolytic]</i>				
C851	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C852	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C853	VCCCCY1HH271J	J	270p 50V Ceramic	AA
C854	RC-KZ0029CEZZ	J	0.01 1.4kV Ceramic	AC
C881	VCEA0A1CW106M	J	10 16V EL.	AB
C883	VCEA0A1CW336M	J	33 16V EL.	AB
RESISTORS				
<i>[M-Ox... Metal Oxide, M-Film... Metal Film]</i>				
R851	VRN-MD2AL470J	J	47 1/10W M-Film	AA
R852	VRD-RA2BE271J	J	270 1/8W Carbon	AA
R853	VRN-MD2AL121J	J	120 1/10W M-Film	AA
△ R857	VRS-VV3AB123J	J	12k 1W M-Ox.	AA
R858	VRD-RM2HD332J	J	3.3k 1/2W Carbon	AA
R859	VRN-MD2AL470J	J	47 1/10W M-Film	AA
R860	VRD-RA2BE271J	J	270 1/8W Carbon	AA
R861	VRN-MD2AL121J	J	120 1/10W M-Film	AA
△ R865	VRS-VV3AB123J	J	12k 1W M-Ox.	AA
R866	VRD-RM2HD332J	J	3.3k 1/2W Carbon	AA
R867	VRD-RA2BE470J	J	47 1/8W Carbon	AA
R868	VRN-MD2AL271J	J	270 1/10W M-Film	AA
R869	VRN-MD2AL121J	J	120 1/10W M-Film	AA
△ R873	VRS-VV3AB123J	J	12k 1W M-Ox.	AA
R874	VRD-RM2HD332J	J	3.3k 1/2W Carbon	AA
R881	VRN-MD2AL561J	J	560 1/10W M-Film	AA
R882	VRN-MD2AL391J	J	390 1/10W M-Film	AA
R883	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R884	VRN-MD2AL152J	J	1.5k 1/10W M-Film	AA
R886	VRN-MD2AL431J	J	430 1/10W M-Film	AA
R887	VRN-MD2AL470J	J	47 1/10W M-Film	AA
MISCELLANEOUS PARTS				
P851	QPLGN0561CEZZ	J	Plug, 5-pin(GBN)	AB
P852	QPLGN0461CEZZ	J	Plug, 4-pin(YBN)	AB
SC851	QSOCV0842CEZZ	J	CRT Socket	AH

Ref. No. Part No. * Description Code

**PWB-B : DUNTK9530WEW5(14ML10)
CRT UNIT**

TRANSISTORS

Q852	VS2SC2229O/1E	J	2SC2229O	AD
Q854	VS2SC2229O/1E	J	2SC2229O	AD
Q856	VS2SC2229O/1E	J	2SC2229O	AD
Q881	VS2SA1266-Y-1	J	2SA1266(Y)	AA
	or			
	VS2SA1015-Y-1			

DIODES

D881	VHD1SS119//1	J	Diode	AB
D882	VHD1SS119//1	J	Diode	AB
D885	VHD1SS119//1	J	Diode	AB

COIL

L851	VP-DF151K0000	J	Peaking 150µH	AB
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CAPACITORS

[EL. --- Electrolytic]

C851	VCCCCY1HH271J	J	270p 50V	Ceramic	AA
C852	VCCCCY1HH271J	J	270p 50V	Ceramic	AA
C853	VCCCCY1HH271J	J	270p 50V	Ceramic	AA
C854	RC-KZ0029CEZZ	J	0.01 1.4kV	Ceramic	AC
C881	VCEA0A1CW106M	J	10 16V	EL.	AB
C883	VCEA0A1CW336M	J	33 16V	EL.	AB

RESISTORS

[M-Ox. --- Metal Oxide, M-Film --- Metal Film]

R851	VRS-CY1JF470J	J	47 1/16W	M-Ox.	AA
R852	VRD-RA2BE271J	J	270 1/8W	Carbon	AA
R853	VRS-CY1JF121J	J	120 1/16W	M-Ox.	AA
△ R857	VRS-VV3AB123J	J	12k 1W	M-Ox.	AA
R858	VRD-RM2HD332J	J	3.3k 1/2W	Carbon	AA
R859	VRS-CY1JF470J	J	47 1/16W	M-Ox.	AA
R860	VRD-RA2BE271J	J	270 1/8W	Carbon	AA
R861	VRS-CY1JF121J	J	120 1/16W	M-Ox.	AA
△ R865	VRS-VV3AB123J	J	12k 1W	M-Ox.	AA
R866	VRD-RM2HD332J	J	3.3k 1/2W	Carbon	AA
R867	VRD-RA2BE470J	J	47 1/8W	Carbon	AA
R868	VRS-CY1JF271J	J	270 1/16W	M-Ox.	AA
R869	VRS-CY1JF121J	J	120 1/16W	M-Ox.	AA
△ R873	VRS-VV3AB123J	J	12k 1W	M-Ox.	AA
R874	VRD-RM2HD332J	J	3.3k 1/2W	Carbon	AA
R881	VRS-CY1JF561J	J	560 1/16W	M-Ox.	AA
R882	VRS-CY1JF391J	J	390 1/16W	M-Ox.	AA
R883	VRD-RA2BE561J	J	560 1/8W	Carbon	AA
R884	VRS-CY1JF152J	J	1.5k 1/16W	M-Ox.	AA
R886	VRS-CY1JF431J	J	430 1/16W	M-Ox.	AA
R887	VRS-CY1JF470J	J	47 1/16W	M-Ox.	AA

MISCELLANEOUS PARTS

P851	QPLGN0561CEZZ	J	Plug, 5-pin(GBN)	AB
P852	QPLGN0461CEZZ	J	Plug, 4-pin(YBN)	AB
SC851	QSOCV0842CEZZ	J	CRT Socket	AH

MISCELLANEOUS PARTS

△ ACC701	QACCD3064CESA	J	AC Cord (13L-M100, CL13M10, 14ML10)	AM
	or			
	QACCD3060CESA			
△ ACC701	QACCD3060CESB	J	AC Cord (13L-M150, CL13M15)	AR
	QCNW-2105PEZZ	R	Connecting Cord	AF
	QCNW-2106PEZZ	R	Connecting Cord	AE
	QCNW-2107PEZZ	R	Connecting Cord	AE
	QANTR0022PEZZ	R	Rod Antenna (CL13M10/15)	AP
	QANTR0018PEZZ	R	Rod Antenna (14ML10)	AQ
SP1	VSP0080PBK58A	J	Speaker, 8 ohm	AL

Ref. No. Part No. * Description Code

SUPPLIED ACCESSORIES

RRMCG1324CESA	J	Infrared R/C Unit (13L-M100, CL13M10)	AT
RRMCG1324CESB	J	Infrared R/C Unit (13L-M150, CL13M15)	AT
RRMCG1339CESA		Infrared R/C Unit (14ML10)	AT
TGAN-0018PEZZ	R	Guarantee Card (13L-M100/150)	AD
TiNS-6571PEZZ	R	Operation Manual (13L-M100/150)	AD
TiNS-6572PEZZ	R	Operation Manual (CL13M10/15)	AD
TiNS-6573PEZZ	R	Operation Manual (14ML10)	AD

**PACKING PARTS
(NOT REPLACEMENT ITEM)**

SPAKC6502PEZZ	-	Packing Case (13L-M100)	-
SPAKC6503PEZZ	-	Packing Case (13L-M150)	-
SPAKC6504PEZZ	-	Packing Case (CL13M10)	-
SPAKC6505PEZZ	-	Packing Case (CL13M15)	-
SPAKC0107GJZZ	-	Packing Case (14ML10)	-
SPAKP0031PEZZ	-	Wrapping Paper (13L-M100/150, CL13M10/15)	-
SPAKP0110PEZZ	-	Wrapping Paper (13L-M100/150, CL13M10/15)	-
SPAKP0104PEZZ	-	Wrapping Paper (14ML10)	-
SPAKX2630PEZZ	-	Buffer Material (13L-M100/150, CL13M10/15)	-
SPAKX0105GEZZ	-	Buffer Material (14ML10)	-
SSAKA0001PEZZ	-	Polyethylene Bag (13L-M100/150, CL13M10/15)	-
SSAKA0101GEZZ	-	Polyethylene Bag (14ML10)	-

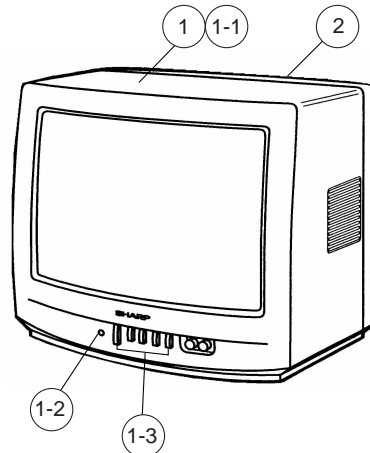
CABINET PARTS

13L-M100/150, CL13M10/15

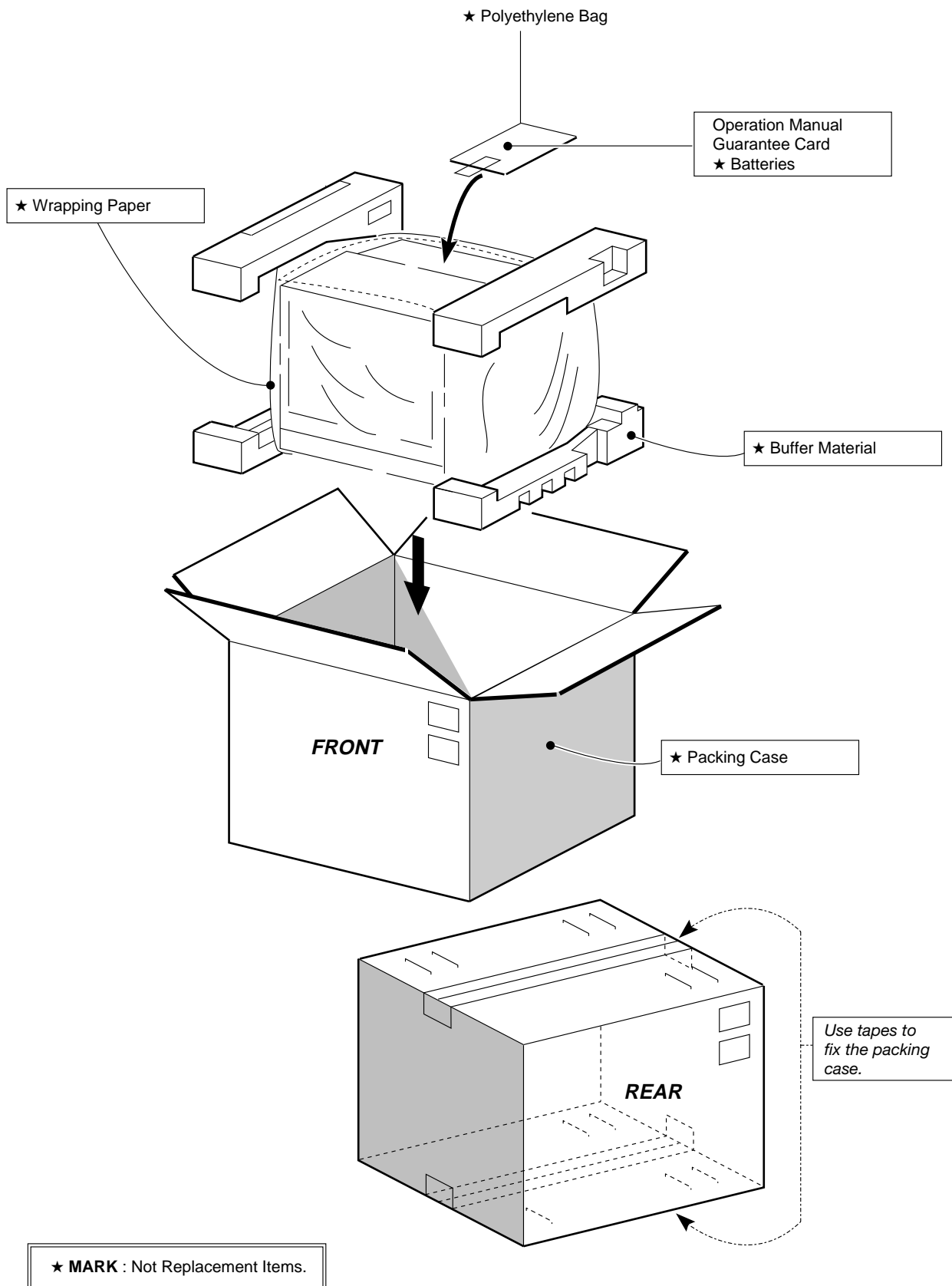
1	CCABA2395WEV8	R	Front Cabinet Ass'y (13L-M100)	AZ
1	CCABA2395WEW0	R	Front Cabinet Ass'y (13L-M150)	AZ
1	CCABA2409WEV6	R	Front Cabinet Ass'y (CL13M10)	BA
1	CCABA2409WEV8	R	Front Cabinet Ass'y (CL13M15)	BA
1-1			Not Available	-
1-2	GCOVA0078PEKA	R	R/C Cover	AD
1-3	JBTN-0306PESA	R	Button (13L-M100, CL13M10)	AD
1-3	JBTN-0306PESB	R	Button (13L-M150, CL13M15)	AD
2	GCABB2309PEKA	R	Rear Cabinet (13L-M100)	AW
2	GCABB2309PEKB	R	Rear Cabinet (13L-M150)	AW
2	GCABB2325PEKA	R	Rear Cabinet (CL13M10)	AW
2	GCABB2325PEKB	R	Rear Cabinet (CL13M15)	AW

14ML10

1	CCABA0107WEH0	X	Front Cabinet Ass'y	-
1-1			Not Available	-
1-2	GCOVA0105GJSA	X	R/C Cover	-
1-3	JBTN-0105GJKA	X	Button	-
2	GCABB0106GJKA	X	Rear Cabinet	-



PACKING OF THE SET



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